Pacific PULP & PAPER Industry

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What About the Pulp Industry's Contribution?

It is timely that American paper manufacturers, pleading with Secretary Hull to preserve their protective tariff, stop and consider the protection afforded them by the wood pulp industry of the United States

THE proposed Reciprocal Trade agreement with Great Britain and the planned renewal of the agreement with Canada has stirred American paper manufacturers to vehement oral and written protests in defense of their protective tariffs which they fear may be reduced by Secretary of State Cordell Hull.

One of the arguments advanced by the paper manufacturers is the sad and true story of what has happened to the American newsprint production as a result of its being placed on the "free list" in 1911. It is a short story. At that time the American mills supplied around 80 per cent of the 1,500,000 tons of newsprint consumed in the United States annually. In 1937 American newsprint mills supplied 22 per cent of the 4,246,000 tons of newsprint consumed in this country.

Now, the manufacturers of other grades fear that the decline of newsprint as an American industry may well be duplicated in the book, bond, tissue and other fields if Secretary Hull reduces the tariff rates on paper in the agreement with Great Britain and Canada. They point out that under the "most-favored-nation" clause other and lower cost countries such as Sweden, Finland, Norway and Czechoslovakia would benefit more than England and Canada.

In their pleas to Secretary Hull to remember that he is an American and that American jobs are at stake, the leaders of the paper manufacturers speak of "the contribution, the sacrifice of newsprint to reciprocal trade ideals back in 1911," and beg that manufacturers of other grades be saved from low wage scale foreign competition which reduced American newsprint to a ghost industry.

● But what about the American wood pulp industry's contribution to reciprocal trade? Was not this industry put upon the sacrificial altar at the same time with newsprint and prevented from normal development in this country which possesses the second largest forests in the world?

In their own best interests is it timely that American paper manufacturers stop and think of the American wood pulp industry's two-fold contribution? The first was its contribution to the ideals of reciprocal trade along with newsprint back in 1911. The second, of vital importance to paper manufacturers, is the contribution of the American pulp industry in recent years to the paper industry's protection. They should give thought to the struggles of the pulp producers of the East and Middle West to keep alive in the face of ruinous foreign competition after pulp was put on the "free list." They should give thought to courageous men who braved the foreign dominated pulp market in the early '20's to establish the wood pulp industry on the Pacific Coast. They should also give thought to those who later on and in spite of opposition from the American paper industry, started the pulp development in the Southern states.

The American wood pulp industry is still a dwarf. It supplies but 18 per cent of the total amount of wood pulp bought by American paper mills. Its growth was stunted in 1911 when wood pulp went on the "free list" at the insistence of the paper manufacturers who desired duty free pulp, just as the newspapers desired duty free newsprint. Paper manufacturers are extremely fortunate that the placing of pulp on the "free list" did not result in the entire elimination of the American pulp industry and the subsequent complete domination by foreign pulp producers of the American market.

The placing of pulp on the "free list" along with newsprint prevented the economical development of American forests on an annual crop basis. The relatively small pulp development that has occurred in the past decade falls far short of utiltizing American forest resources to their potential maximum on a perpetual basis, and it likewise falls far short of supplying the POTENTIAL EMPLOYMENT possible had our pulp industry been allowed a normal development under tariff protection that has been given to paper manufacturing.

● But, without tariff protection and against low wage foreign pulp the American pulp industry gradually developed due to resources of the finest pulp woods and to the courage of a few men. Its growth has been slow. It was for many years on the defensive against well established foreign pulp. However, steadily improved quality gained customers and prestige and brought about development of additional production.

The first test of strength of the slowly growing American pulp industry came last year when the American mills held down prices PROTECTING AMERICAN MANUFACTURERS from complete dependence upon foreign pulp which was taking advantage of an apparent shortage with skyrocketing prices.

How much protection would these tariffs on paper have afforded the American paper industry had it not been for the fact that domestic woodpulp of good quality at reasonable prices was available? It is possible that these protective tariffs on paper might have been rendered worthless by unreasonably high prices on foreign pulp had it not been for the American pulp industry.

These protective tariffs, which the American paper manufacturers are urging Secretary Hull to preserve intact, are

only protective now because the American wood pulp industry CONTRIBUTES 18 per cent of the pulp sold in the United States, preventing complete foreign domination of wood pulp sales.

Following is a statement, issued in connection with the negotiations for a new Reciprocal Trade Agreement with Canada, by D. Clark Everest, president of the American Paper & Pulp Association and president of the Marathon Paper Mills Company of Rothschild, Wisconsin:

● "In 1937 the value of Canadian pulpwood, woodpulp and newsprint paper sold in the United States duty free under the reciprocal agreement of 1911 amounted to $172,000,000 and furnished more than one-third of the funds necessary to pay for all Canadian purchases of all commodities from the United States in that year," said Mr. Everest. "Having made this great contribution to the theory of reciprocity, is the paper industry to be asked to make further sacrifices and check a development which has been under way in the last few years?

"To make the Canadian production of newsprint paper which is in excess of 3,000,000 tons requires an enormous amount of labor in mill and woods operations with payrolls mounting to as much as $50,000,000 a year. Overall, every ton of paper imported means a loss of work equivalent to the employment of one man for a week.

"Under the present rates of duty imports of printing paper increased one thousand per cent in quantity from 1931 to 1937, and in the latter year imports were 15,000 tons.

"The production of newsprint involves labor to a total of $50,000,000. If present Canadian facilities were to be fully utilized for the supply of the American market through reduction of present duties, a staggering loss of wages to American workmen would result. If American mills made the dutiable paper, outside of duty free newsprint, which was imported last year, there would have been more than $5,000,000 in additional wages disbursed to American workmen. All of it could have been made here."

● Mr. Everest's statement fits not only newsprint but wood pulp as well. The story is relatively the same.

At this time, when paper manufacturers of the United States are seriously worried over the possible loss of their protective tariffs, it is timely that they should stop, think and appreciate the contribution being made to their continued operation by the American wood pulp industry, an industry they came very nearly sacrificing by placing its products on the "free list" in 1911.

National Envelope Organized in San Francisco

● A new San Francisco envelope firm is the National Envelope Corporation, established early this year at 1211 Folsom Street by Howard N. Gilmore and George S. Bennett, both formerly with the Field-Ernst Envelope Company of that city. Mr. Gilmore is president of the National company, Mr. Bennett is vice-president and F. W. Tenney, an attorney, secretary. They have 7,500 feet of floor space at their plant with latest machinery.

First Sheet Pulp Made at Bellingham

FIRST SHEET PULP AT BELLINGHAM » » » On March 15th the first sheet pulp was produced on the first of the two new fan dryers to be installed in the new unbleached sulphite pulp mill of the PUGET SOUND PULP & TIMBER COMPANY at Bellingham, Washington » » » This first machine drys the unbleached sulphite produced in the company's present 110 tons per day mill, displacing the old shredded pulp dryers » » » The second fan dryer is now being erected on the foundations showing at the right and will dry the output of the new pulp mill, 125 tons per day, which will be completed some time next month » » » Cavin, Marshall & Barr are the engineers in charge of the Bellingham mill construction.

Sandwell Leaves for Australia To Start Work on News Mill

Derwent Valley Pulp & Paper Mills, Ltd., To Be Ready for Production July 1, 1939

• Percy Sandwell, Vancouver pulp and paper mill conulting engineer, returned to British Columbia from a visit to Europe, which included trips to Sweden and Finland, late in March, and on April 12 he will leave for Australia, where he will supervise, as chief engineer, the building of the commonwealth's first newsprint mill, in the Derwent valley of Tasmania.

Mr. Sandwell was appointed as chief technical expert on the Australian project last fall and his visit to Europe was for the purpose of buying machinery. Opportunity was taken of familiarizing himself with the newest ideas in pulp and paper mill building and operating technique. While in England he concluded arrangements for the purchase of a Walmsley newsprint machine, and it is understood that orders for nearly all the equipment required will be placed with English manufacturers.

Finland presented an ideal opportunity for studying the latest features in paper mill development because so many of the mills there are new, said Mr. Sandwell. Only a comparatively few years ago Finland did not exist as a national entity. When the state was created it was realized that pulp and paper would become important industries, and everything was done to assist in their development.

Instancing the rapid growth of Finland's newsprint trade Mr. Sandwell said that in 1927 newsprint production there was 200,000 tons. In 1936 the production had been doubled. Even greater had been the expansion in chemical pulp production—from 437,000 tons in 1925 to 1,402,000 tons in 1936.

"Finland is going to be an important factor in the world pulp and paper situation for many years, and so is Sweden," said Mr. Sandwell. "They may be old countries, historically, but their forest industries are geared to perpetual production and they can teach us a thing or two about mill construction and manufacturing."

• Mr. Sandwell did not observe any pronounced new trend in mill design, however. So far as machines were concerned, accent was on high speed, as everywhere else, but Mr. Sandwell was unable to discover any new and radical departure in general layout. However, most pulp and paper manufacturers were not skimping on expense. They realized that the industry would be permanent and were building with the best of materials and equipment, and more attention was being given to the convenience and comfort of the workers. There was a trend away from a multiplicity of small mills towards a limited number of large plants, several of which had been built under specifications of John Stadler, of Montreal, whose plans have been followed in the construction of many mills in Eastern Canada. Most of their machinery is from England, although Finland has started to manufacture some of its own.

In Sweden, Mr. Sandwell discussed the sustained yield plan in forestry adopted there. It was the policy of the country not to permit manufacture of lumber or pulp and paper in excess of the forest yield. In Finland such a program had not yet become a necessity owing to the greater extent of the virgin timber stands, but Swedish forestry experts told him that Finland would be in peril of overdevelopment of her pulp industries unless a closer check were applied in the near future. Finland, like other European countries, will apply the brakes to exploitation in plenty of time to avert forest depletion, Mr. Sandwell believes.

• Excavation for the Derwent valley mill has already been started, Mr. Sandwell reports, and a wharf is under construction. The job is being supervised until Mr. Sandwell's arrival by L. S. McLennan, another Vancouver construction engineer, who was formerly with Powell River Company and the British Columbia Electric Railway before taking the Australian job.

"Building the Australian mill won't involve establishment of a new town," said Mr. Sandwell. "The mill will be close enough to New Norfolk to permit most of the employees to live there. Altogether there will be about four or five hundred men working, including the woods crew. First unit will give us a production of 100 tons of newsprint daily, and eventually we will have a capacity of 400 tons. A two-roll machine will be installed first, to be followed by two three-roll machines. First paper will be produced about July 1, 1939.

"At first we will be able to meet between 15 and 20 per cent of Australia's newsprint requirements; eventually we will supply about 60 per cent, but several years will elapse before we reach that point. Eucalyptus wood will be used, and there's nothing unusual about the process—just the standard newsprint mill technique. The same kind of wood was put through the test at Pacific Mills, Ltd., Ocean Falls, B. C., and was found to be quite satisfactory."

Mr. Sandwell, who will remain in Australia for several years according to present plans, does not believe that Australia will ever be completely independent in regard to newsprint. Much of it will continue to be supplied from North America, he believes, and the bulk of Australia's newsprint for the next seven years has already been contracted for from a group of Canadian newsprint mills in a deal closed last summer by William Dunstan, general manager of Melbourne Herald.

Sulphite to the amount of about 7500 ton annually will be imported by Australia for use in the new mill at the outset, and Mr. Sandwell is uncertain whether this will be bought in this country or Sweden. It depends on the price.

P. SANDWELL, To Build Australian Newsprint Mill

Union Lumber Making Pulp Experiments

• Experiments are under way at the Union Lumber Company at Fort Bragg, California, to determine if pulp can be made from redwood.

W. G. Collins, plant superintendent, says that as a result of laboratory experiments, the company is now installing equipment that will give about a two-ton daily capacity.

"This is primarily to determine whether or not the laboratory experiments can be converted into a commercial process," Mr. Collins says.

"It will be late in April before we will be turning out a finished product from the experimental unit and at that time we will know whether we have anything that is saleable."

The plant is working on waste from the Union's big redwood sawmill.

Shaffer, Fernandina Become Rayonier Divisions

• Recently the Shaffer Pulp Company and the Fernandina Pulp & Paper Company were dissolved as separate corporate subsidiaries of Rayonier Incorporated and became divisions of the parent corporation.

Clyde B. Morgan, who was president of the Fernandina Pulp & Paper Company prior to its dissolution, was elected a vice-president of Rayonier Incorporated with headquarters in New York City.

Joint Meeting Called For Portland in June

The joint meeting of the Pacific Section of TAPPI and the Pacific Coast Division of the American Pulp & Paper Mill Superintendents Association will be held JUNE 3rd and 4th at the Benson Hotel, Portland, Oregon

● The officers of the Pacific Section of TAPPI and of the Pacific Coast Division of the American Pulp & Paper Mill Superintendents Association started the ball rolling early this year having plans nearly completed by April 15th for the annual joint meeting in June.

Chairman L. S. McCurdy of the Pacific Coast Division of the Superintendents and Chairman George H. McGregor of the Pacific Section of TAPPI appointed Kenneth B. Hall of Portland as general chairman of the joint convention. Officers of the two associations met with general chairman Hall in Seattle April 5th and laid plans for a most instructive and interesting meeting.

The dates chosen are Friday and Saturday, June 3rd and 4th, and the place is the Benson Hotel in Portland, Oregon.

Registration in charge of R. T. Petrie of the Bagley & Sewall Company, begins at 11 a. m. Friday, June 3rd and will continue through the afternoon and evening. A golf tournament is being planned for Friday afternoon at the Oswego Lake Golf & Country Club by Don L. Shirley, chairman.

Friday evening is in charge of John E. Hassler who is planning an informal get-together party in the Oak Room of the Benson Hotel.

Up Early Saturday

● To get an early start Saturday morning general chairman Kenneth B. Hall has scheduled a stag breakfast at 8:30 in the Crystal Room of the Benson. Z. A. Wise is chairman in charge of the breakfast and will also serve as toastmaster. Mr. Wise, who is president of the Griffith Rubber Mills, is an expert at planning interesting breakfast programs having served as president of the Portland Breakfast Club.

At 10 a. m. Saturday the business meeting will start and papers will be presented. A partial list of papers is available at the time of going to press and includes "The Use of Starches in the Paper Industry" by Jerome Strasser of the Stein, Hall Manufacturing Company of Chicago; and, "Measurements of Incrustant Removal from Cellulose," by George E. Schmidt of the Pennsylvania Salt Manufacturing Company of Washington, Tacoma.

Other papers will be announced later.

At 12:30 Saturday the ladies will join the men at luncheon in the Crystal Room of the Benson. Andreas Christensen, technical adviser of the British Columbia Pulp & Paper Company, Ltd., will be toastmaster. A speaker, prominently associated with the pulp and paper industry, will be named later on.

Round Table Discussion

● Saturday afternoon will be devoted to the famous round table discussion which has proved of great interest and value at previous meetings of the superintendents and at the joint meetings with TAPPI. It will be conducted by L. S. McCurdy, chairman of the Pacific Coast Division of the Superintendents and George H. McGregor, chairman of the Pacific Section of TAPPI.

Saturday evening a dinner dance will be held in the Crystal Room starting at 7:30. Andreas Christensen will serve as master of ceremonies and will award the prizes to the winners of the Friday afternoon golf tournament. There will be no talks at the dinner dance. Dancing will be interrupted for two excellent floor shows, employing the finest talent available according to general chairman Hall.

Everyone interested in the industry is invited to attend. Reservations for hotel accommodations and for the meeting should be sent early to general chairman Kenneth B. Hall, 219 Pittock Block, Portland, Oregon.

Attending the meeting of the executive committees in Seattle April 5th were L. S. McCurdy, chairman, E. W. G. Cooper, first vice-chairman, Anton Seibers, second vice-chairman, and A. S. Quinn, secretary-treasurer of the Pacific Coast Division of the American Pulp & Paper Mill Superintendents Association; George H. McGregor, chairman, N. W. Coster, vice-chairman, J. V. B. Cox, secretary-treasurer, and Earl G. Thompson (who served TAPPI as secretary-treasurer for two terms) of the Pacific Section of TAPPI. Kenneth B. Hall, general chairman of the joint meeting also attended the meeting.

V. D. Simons Passes In Arizona

● Venning Dodge Simons, 66 years old, well known consulting engineer of Chicago, passed away Thursday, March 24th, at Tucson, Ariozna, where he had gone for the winter because of failing health. Funeral services were held in Chicago. He is survived by his widow, two daughters and three sons.

He was born August 1st, 1871, in Allegan, Michigan, and gained his education from study and experience. His natural engineering ability and interest led him into the paper industry in Kalamazoo. In 1897 he became superintendent and manager of the public utility plant at Battle Creek. He went to Wisconsin Rapids in 1903 to take charge of the design and installation of electrical and hydraulic equipment for the new Consolidated Water Power and Paper Company mill. The first variable speed paper machine drive was installed at this mill under his direction. Three years later he became manager of the Biron plant of the Company. In 1912, he patented the sectional electric drive for paper machines which has since become an important features of modern paper making. After participating in other engineering and construction projects on the West Coast and in Wisconsin, he opened an engineering office in Chicago in 1914 and has maintained it continuously since that time.

Mr. Simons was known throughout the industry as a consultant and his practice included the design and construction of many new pulp and paper mills and rehabilitation and enlargement of existing properties. The generation of steam electric power in connection with paper mills is said to have been brought to new levels of perfection under his guidance.

He was the inventor of numerous processes used in the industry and at his death he was actively engaged in research on new and progressive ideas for the paper industry—subjects of never failing interest and almost fully absorbent of his energies. Mr. Simons was a Mason and member of the Western Socitey of Engineers.

A large proportion of Mr. Simons design and construction work was performed on the Pacific Coast. He designed and supervised the construction of a number of the modern Pacific Coast pulp and paper mills including the Washington Pulp & Paper Corporation at Port Angeles, the Rainier Pulp & Paper Company at Shelton, the Grays Harbor Pulp & Paper Company at Hoquiam, The National Paper Products Company mill at Port Townsend, and handled modernization work for the Crown Willamette Paper Company at Camas and the Hawley Pulp & Paper Company at Oregon City, Oregon.

British Columbia Pulp & Paper Profit Shows Gain Over 1936

Net Profit of $225,011 in 1937 Against $15,214 in 1936

● Although prices had begun to fall before the end of the year, 1937 was a highly profitable period for British Columbia Pulp & Paper Company, according to a statement issued by President Lawrence Killam.

A net profit for the year amounting to $225,011 was reported for the year, compared with only $15,314 in the previous year. The increased returns were due to the rapid expansion in the pulp market and the soaring prices for the mills' product early last year and continuing through most of the summer.

During the year British Columbia Pulp & Paper Company's mill at Port Alice was changed over from paper grade bleached sulphate to rayon grades. A bleach plant was added to the wood-fiber mill making it capable of producing either rayon or paper pulps.

Mr. Killam points out that the conversion program cost the company $1,159,080. "It is believed that the company will be in a much stronger position when the new products have become firmly established with the consumers," says Mr. Killam.

Referring to the trend of the market last year, Mr. Killam points out that in the last quarter of 1937, due to general conditions, the demand weakened so rapidly that monthly allotments were cancelled to a large extent. Before the end of the year prices had begun to fall.

● Payment of interest on the 6 per cent first mortgage bonds was made in full during the year, also the November interest payment on the 7 per cent general mortgage bonds. An amount of $132,000 of 6 per cent first mortgage bonds were retired through the sinking fund.

Profit for the year was $225,010 after allowing for interest on bonded debt and providing for depreciation, depletion and taxes. Profit on sale of the company's own bonds is not included in this figure.

"The carrying out of our construction program made operation of the plants during the year more difficult for all employees of the company," states Mr. Killam, who goes on to point out that operating profits after charging $6,417 for depletion of timber limits were $1,197,538, compared with $531,467 in 1936 after $709 for depletion.

"After $303,564 interest on bonded debt against $319,717 in 1936; $495,000 for depreciation against $238,000; $130,000 for income taxes against $12,000; $3000 for directors' fees, the same as in the previous year, and $41,863 for legal fees and executive remuneration, total deductions of $973,427 against $604,119 net profit before taking into account profit on sale of the company's own bonds was $225,010. In 1936 the net profit of $15,214 was after taking into the calculation $63,298 profit on sale of investments.

"The deficit account as at December 31, 1937, stood at $1,040,042 compared with $1,073,163 at the end of 1936, after giving effect to the transfer of profits on sale of the company's own bonds to a special reserve.

"The balance sheet shows property account after deducting reserves for depletion and depreciation totalling $3,297,710 (an increase in reserves from $2,853,253 at the end of 1936), at $7,356,596 against $6,641,973 at the end of 1936.

"Current assets were $1,252,145 and current liabilities $569,830, leaving working capital at $682,315 as compared with $794,870 at the end of 1936. After allowing for $749,500 in 6 per cent first mortgage bonds held by the company and $777,500 redeemed through sinking fund there was outstanding $3,130,500 as against $3,180,000 one year previously.

After making allowance for $221,900 in 7 per cent general mortgage bonds held by the company and $54,600 redeemed through sinking fund there were $1,223,500 outstanding compared with $1,445,400 at the end of 1936. Total bonded debt outstanding was $4,354,000 at the end of 1937, compared with $4,625,400 at the end of 1936. Thus the company spent over $1,000,000 on improvements during the year and reduced its bonded debt by a substantial sum.

Interest payable on the 7 per cent bonds November 1, 1940, not including interest on bonds held by the company amounts to $524,643 is shown as a deferred liability. The comparable amount under this heading at the end of 1936 was higher, at $551,841. Another deferred liability at the end of 1937 consisted of a bank time loan maturing January 3, 1940 (secured). There was no corresponding item in 1936.

Under the heading of "construction liabilities" at the end of last year was the sum of $228,302, of which $209,037 was payable by April 30, 1938, and the balance at subsequent dates. Construction liabilities one year previously were $17,800.

B. C. Pulp & Paper Reelects Officers

● At the annual meeting held in Vancouver, B. C., March 31st, officers and directors of the British Columbia Pulp & Paper Company were reelected.

Lawrence Killiam was reelected president; George Kidd, vice-president; O. A. Jorgensen, treasurer; W. H. Malkin, R. C. Buchanan, Cecil Killam and I. W. Killam, directors.

Rupert Transferred To Port Angeles

● Steve Rupert, night superintendent for Rayonier Incorporated, Shelton Division, was recently transferred to the Port Angeles Division of the Company.

B. C. to Hold Conference On Expansion of Pulp Industry

● The British Columbia government, foreseeing the day when the great Douglas fir stands will be depleted and the timber industries will be largely dependent on pulpwood species as the mainstay of the forest industries, is calling a conference of recognized pulp and paper experts with a view to mapping a long-term policy for the most economical development of the province's pulpwood resources.

Hon. W. J. Asselstine, newly appointed minister of trade and industries, believes that the government should have at its disposal the best of advice relating to woods chemistry, and he has made arrangements for T. A. McElhanney, superintendent of the Dominion forest products laboratory, Ottawa, to come to the coast for the purpose of making a survey of the situation, particularly from the market standpoint.

"We have reached the point where it it becomes necessary to take advantage of the recent developments in wood chemistry," said Mr. Asselstine. "There is too much waste in the forest industries as they are now constituted. The trend of forest management all over the world is towards the use of smaller trees in pulped form rather than the big timber, which we will lose during the next decade or so anyway.

"If we don't find a means of disposing of these so-called inferior woods the time will come within the visible future when our timber industry will shrink with grave effects on the whole business of British Columbia."

Vernon Turbine Installation Proves timely

● The Vernon plant of the Fibreboard Products, Inc., installed a 2000 KW turbine in February for its own power uses. During the flood that occurred the end of February and the first of March, the new power plant served a sudden special usefulness. The power lines from Boulder Dam, which were providing the power for the plant, were cut off. The new unit went into service and a five-hour shut-off period was saved.

Fibreboard Men See Movies

● Through the courtesy of the Pacific Coast Supply Company, two motion pictures were shown at the Vernon plant of the Fibreboard Products, Inc., during the first part of April. One was "Two Related Industries," sponsored by F. C. Huyck & Sons, manufacturers of paper makers felts, and the other was "Beyond the Rainbow," sponsored by the Heller and Merz producers of dyestuffs.

Seattle TAPPI Dinner Hears Interesting Talks

Talks given by Earl C. Squire, American Trade Commissioner to Australia, and Robert B. Wolf, General Manager Pulp Division, Weyerhaeuser Timber Co.

● More than 125 attended the Seattle dinner meeting held by the Pacific Section of TAPPI in the social hall of the new Daniel Bagley Hall, headquarters of the Departments of Chemistry and Chemical Engineering, Tuesday evening, April 5th.

After the dinner the group adjourned to the auditorium where chairman George H. McGregor of the Pacific Section of TAPPI presided and introduced the speakers.

Through the courtesy of Philip M. Crawford, manager of the Bureau of Foreign & Domestic Commerce in Seattle, the guests at TAPPI's Seattle dinner were privileged to hear a talk by Earl C. Squire, American Trade Commissioner to Australia. Mr. Squire, who has been in Australia for eleven years is on his way to Washington for consultation with officials of the Department of Commerce.

Mr. Squire gave his listeners a comprehensive picture of business and governmental conditions in Australia. He said that Australian business was good and that 1937 had been a better year than 1929. Mr. Squire remarked that the feeling in Australia toward the United States was steadily improving and that special trade restrictions against U. S. products were gradually being removed. There are about fifty branch plants of American companies in Australia and these are contributing toward a better understanding between the two countries.

The secondary industries brought Australia out of the depression, Mr. Squire said. The reasons for their progress were several. One was the depreciation of the Australian pound 20 per cent more than the English pound. Another reason was the decline in wages amounting to 12 per cent. Despite the depreciation of its money Australian costs have not gone up, hence the country has retained this advantage. Total costs of manufactured goods are then about 30 per cent below 1929, permitting Australian industries to compete with British and American manufactured products. One example is iron and steel, Australia having built this up to a point last year where 85 per cent of the iron and steel consumed was produced domestically.

● Real wages have not declined, Mr. Squire emphasied. In fact, they are higher than in 1929. In other words today's wages will purchase more in Australia than the same money would buy in 1929. This is one reason for a satisfactory labor situation. No serious strikes have occurred in Australia since 1930. Labor is well organized politically and was in control of both Commonwealth and state governments when the depression hit the country. The labor government reduced wages because they could not go further into debt, the country having used up its credit aboard. They had to very nearly balance their budget, which proved a good thing.

There are practically no unemployed in Australia at present the figure being but 4 per cent last year. Industry expanding has absorbed the unemployed.

Australia is reducing her imports by building up her manufacturing industries. In the late '20's she imported goods to the amount of about 150,000,000 pounds sterling, but last year her imports were 103,000,000 pounds sterling. Mr. Squire stated that the United States is still shipping more goods by double to Australia than to any other country except Great Britain. The type of imports by Australia is constantly changing, being more and more industrial.

One problem in developing greater trade between the United States and Australia is that of transportation. Insufficient fast ships between the two countries retards trade development. U. S. aviation has a great opportunity in Australia Mr. Squire stated as the country is intensely interested in developing remote sections by means of airplanes having found that railroad building was not economically sound in all regions. Rail travel is a serious problem in Australia as in the early days each state built its own railroads and the gauges vary, necessitating reloading at state lines.

The first airplanes imported from the U. S. came in 1935 and this business is rapidly developing. The development of airmail service by Pan-American Airways between the U. S. and Australia will do much to increase business between the two countries.

● A coincidence was the presence at the meeting of another man from Australia, W. G. Purdie, general superintendent of mills for the Australian Paper Manufacturers, Limited, of Melbourne and Sydney.

The second speaker was Robert B. Wolf, general manager of the Pulp Division, Weyerhaeuser Timber Company, who spoke on his impressions of Europe, gained from an extended trip made last summer and fall with Oliver M. Porter, secretary of the United States Pulp Producers Association. Notes on Mr. Wolf's talk appear at the end of this article.

Chairman McGregor thanked Dr. W. L. Beuschlein of the Department of Chemistry and Chemical Engineering for taking charge of arrangements for the dinner. He introduced Dr. H. K. Benson, executive officer of the department who invited those attending to inspect the new chemistry building, particularly the research laboratories a number of which were in operation.

Following is a partial list of those who attended the TAPPI dinner meeting in Seattle, April 5th.

THE VANCOUVER DINNER IS MAY 2nd

The seventh and last Dinner Meeting to be held by the Pacific Section of TAPPI during the season of 1937-1938, will be at the TERMINAL CITY CLUB in VANCOUVER, B. C., MONDAY evening, MAY 2nd, at 6:30 p. m. Andreas Christensen, Technical Adviser of the British Columbia Pulp & Paper Company is chairman of the meeting.

Mr. Christensen has arranged for the presentation of two moving pictures, a discussion and a short talk. The Imperial Oil Company, Ltd., will present a sound motion picture entitled, "The Inside Story," which covers the problems incident to the lubrication of cylinders, bearings and gears. An Imperial Oil lumbrication engineer, W. Stormond, will be present to lead a discussion on lubrication.

The other moving picture will be presented by the Goodyear Tire & Rubber Company of Canada entitled, "Conquering the Jungle." W. C. Grieve will accompany the picture with a short talk on "The Modern Application of Rubber in the Paper Industry."

RESERVATIONS for the dinner May 2nd should be made with G. D. HUMPHREY of the British Columbia Pulp & Paper Company, Limited, Bank of Nova Scotia Building, Vancouver, B. C.

• Niles M. Anderson, St. Regis Kraft Co., Tacoma; John Ashby, Westminster Paper Mills, New Westminster, B. C.; John H. Baker, Pennsylvania Salt Mfg. Co. of Washington, Tacoma; B. A. Bannan, Western Gear Works, Seattle; Charles H. Belvin, Chromium Corp. of America, Portland; Dr. H. K. Benson, University of Washington, Seattle; Dr. W. L. Beuschlein, University of Washington, Seattle; Robert A. Bremner, Electric Steel Foundry Co., Portland; G. S. Brett, A. M. Castle Co., Seattle; A. M. Buck, Pulp Division, Weyerhaeuser Timber Co., Everett.

Fred A. Buckley, Everett Pulp & Paper Co., Everett; H. E. Bukowsky, National Paper Products Co., Port Townsend; J. R. Bruckart, U. S. Forest Service, Olympia; A. M. Cadigan, St. Regis Kraft Co., Tacoma; R. S. Carey, National Aniline & Chemical Co., Portland; John M. Carlson, Soundview Pulp Co., Everett; Charles Champion, R. T. Vanderbuilt Co., New York City; Dan Charles, Knox Woolen Co., Seattle; R. E. Chase, R. E. Chase & Co., Tacoma; Roger Chase, Jr., R. E. Chase & Co., Tacoma.

Sidney M. Collier, Soundview Pulp Co., Everett; D. H. Cook, Chase Brass & Copper Co., Seattle; Edward W. G. Cooper, Crown Willamette Paper Co., Division Crown Zellerbach Corp., Camas; N. W. Coster, Soundview Pulp Co., Everett; A. H. Cox, A. H. Cox & Co., Seattle; J. V. B. Cox, Hercules Powder Co., Portland; E. Crane, Seattle; Philip M. Crawford, Bureau of Foreign & Domestic Commerce, Department of Commerce, Seattle; E. F. Drake, National Paper Products Co., Port Townsend; R. E. Drane, St. Helens Pulp & Paper Co, St. Helens.

James P. V. Fagan, Puget Sound Pulp & Timber Co., Anacortes; F. E. Flannery, Republic Creosoting Co., Seattle; L. P. Fortier, Everett Pulp & Paper Co., Everett; O. E. Fox, Pulp Division, Weyerhaeuser Timber Co., Everett; N. O. Galteland, St. Regis Kraft Co., Tacoma; Irving R. Gard, Merrick Scale Mfg. Co., Seattle; A. S. Gerry, Pulp Division, Weyerhaeuser Timber Co., Everett; William R. Gibson, Northwest Filter Co., Seattle; H. M. Gustafson, General Electric Co., Seattle; Kenneth B. Hall, Improved Paper Machinery Co., Portland.

• S. H. Harrison, Westinghouse Electric & Mfg. Co., Seattle; L. B. Hartman, Pulp Division, Weyerhaeuser Timber Co., Everett; Andrew D. Hawley, Pacific Coast Supply Co., Seattle; E. A. Heiss, Wallace & Tiernan, Seattle; Norman Higlund, Soundview Pulp Co., Everett; L. E. Hill, Jr., Pulp Division, Weyerhaeuser Timber Co., Everett; Albert Hooker, Hooker Electrochemical Co., Tacoma; Geo. W. Houk, Hooker Electrochemical Co., Tacoma; C. P. Idyll, B. C. Pulp & Paper Co., Woodfibre, B. C.

R. M. Inkster, Pulp Division, Weyerhaeuser Timber Co., Everett; Ray Johnson, Pulp Division, Weyerhaeuser Timber Co., Everett; Blaine L. Kerns, Westinghouse Electric & Mfg. Co., Seattle; K. A. Knudson, Everett Pulp & Paper Co., Everett; Joe C. Lane, Northwest Lead Co., Seattle; Carl Lilja, Pulp Division, Weyerhaeuser Timber Co., Everett; A. H. Lundberg, Seattle; R. P. Lungreen, Soundview Pulp Co., Everett; J. H. McCarthy, Soundview Pulp Co., Everett; L. S. McCurdy, National Paper Products Co., Port Townsend.

Robert W. Martig, Control Equipment Co., Portland; Ned Menzies, The W. S. Tyler Co., Seattle; Jack Merriman, Merriman Paint Co., Seattle; George E. Millard, Chemical Engineering, Seattle; Vondis Miller, U. S. Forest Service, Olympia; T. E. Moffitt, I. F. Laucks, Inc., Seattle; A. B. Moody, Everett Pulp & Paper Co., Everett; D. C. Morris, James Brinkley Co., Seattle; Geo. P. Nelson, Pulp Division, Weyerhaeuser Timber Co., Everett; Fred Nicholson, Stetson-Ross Machine Co., Seattle.

E. A. Norton, Pulp Division, Weyerhaeuser Timber Co., Everett; Adolph Orup, Soundview Pulp Co., Everett; Frederic M. Pape, Wilson & Geo. Meyer & Co., Seattle; J. W. Peckham, Bristol Co., Seattle; W. G. Purdie, Australian Paper Manufacturers, Ltd., Melbourne; Albert S. Quinn, Stebbins Engineering Corp., Seattle; Carl A. Ramstad, Soundview Pulp Co., Everett; H. A. Rehnberg, Northwest Filter Co., Seattle; Carl Ries, Pulp Division, Weyerhaeuser Timber Co., Everett; Ed. F. Riley, Palmer Supply Co., Seattle.

• Oliver E. Ronken, Soundview Pulp Co., Everett; Don Ross, Hooker Electrochemical Co., Tacoma; James Ruck, St. Regis Kraft Co., Tacoma; H. Rodford Russell, Everett Pulp & Paper Co., Everett; Walter A. Salmonson, Coast Mfg. & Sales Co., Portland; B. W. Sawyer, Foxboro Co., Portland; S. J. Selden, Consulting Engineer, Tacoma; Harlan Scott, Pacific Pulp & Paper Industry, Seattle; Brian Shera, Pennsylvania Salt Mfg. Co. of Washington, Tacoma; A. P. Siebers, Longview Fibre Co., Longview.

P. S. Simcoe, National Paper Products Co., Port Townsend; Lawrence K. Smith, Pacific Pulp & Paper Industry, Seattle; E. C. Squire, American Trade Commissioner, Sydney, Australia; P. E. Sullivan, Ingersoll-Rand Co., Seattle; James B. Symonds, Sinclair Wire Works, Seattle; Dr. H. V. Tarter, University of Washington, Seattle; Earl G. Thompson, Great Western Electro-Chemical Co., Seattle; H. A. Vernet, A. E. Staley Mfg. Co., San Francisco; Edward A. Vohs, Pulp Division, Weyerhaeuser Timber Co., Everett; Harold F. Warren, R. E. Chase & Co., Tacoma.

Wm. T. Webster, St. Regis Kraft Co., Tacoma; A. F. Winklesky, Everett Pulp & Paper Co., Everett; R. B. Wolf, Pulp Division, Weyerhaeuser Timber Co., Longview; A. D. Wood, Tacoma Division, Rayonier Incorporated, Tacoma.

"European Impressions," Notes on Mr. R. B. Wolf's Talk

MR. WOLF told of the trip that O. M. Porter, secretary of the United States Pulp Producers Association, and himself made to England, France, Germany, Russia, Finland, Sweden, and Norway. He stated that most of the time was spent in the latter three countries, which are the principal countries of Europe manufacturing pulp for export.

He said that the most interesting countries from the point of view of contrasting economic systems were Germany, Russia, and Sweden, but that so far as travellers in these countries were concerned, there were as a rule only two general points of view. Either the traveller was very much for or very much against the system in vogue. There was little evidence that people were trying to evaluate what they saw impersonally.

After stating his belief that it was essential to keep one's mind open and avoid pre-judgment of governmental methods in "fascist" Germany, "communist" Russia, or "democratic" Sweden; he asked his hearers to remember that he was not condemning or extolling, but was merely reporting. He then made the following observations:

• "I came back to America more firmly convinced than ever that no system will cure our industrial and economic ills. In each of the countries that we visited, it was apparent that the party in power went into power in order to arrest the processes of disintegration that had set in. I believe it is Shakespeare who said, 'Order is Heaven's First Law,' and when one considers that Germany had over thirty political parties before the Nazis came into control, and that orderly government had largely broken down, it is not to be wondered at that conditions were ripe for the people to back up any group that was strong enough to promise them security.

It must be remembered that the temperament of the German people is such that they have for many years believed that in their case collective security was the best. There was evidence in Germany that the majority of people, especially the younger generations, were back of the Hitler regime."

Mr. Wolf went on to describe the way in which modern methods were used to mould public opinion to back up the Nazi party. He told how the country had been divided up into approximately eighteen basic industries, and that the National Socialist Party under Hitler's direction had taken over the functions ordinarily exercised by labor unions, and that representatives of the party, appointed by the party leaders, acted as the agents by which the conflict between "labor" and "management" were mediated, and that the decision of government representatives in all such matters was final.

One industrialist, whom he asked to describe the new regime, likened it to a military system wherein the workers were the soldiers, the technical men the minor officers, and the plant manager the captain of the "company." All the plants of the company were likened to a "regiment," and all the various companies combined, formed the "Division" which covered the entire country. The Pulp and Paper Division was one of the eighteen Divisions into which the National Socialist Party had divided the country.

• Mr. Wolf then gave a resume of the notes that he made when he and Mr. Porter talked with one of Hitler's right hand men in the "labor front" branch of the government, which practically replaced the trade unions that formerly existed.

From his remarks it was obvious that in Germany the state was all powerful, and that the individual must make his will conform to the will of the state. "The devices used in order to perpetuate the power of the state were first, propaganda, second, compulsion based upon the use of the police power backed up by the army, and third, fear inspired through the use of the secret service arm of the government."

Mr. Wolf gave it as his opinion

that there was nothing inherently "wrong" in these methods from the point of view of the concepts embraced by the National Socialist Party (the Nazi Party). "If the state is to become all powerful it must use these methods, and an all powerful state apparently requires a dictator in whom rests all ultimate authority." He pointed out that if the majority of the German people wanted this system, it was undoubtedly "right" for them, although "wrong" from the point of view of a democratic country like our own, right and wrong being relative terms depending upon the viewpoint.

Mr. Wolf then gave his impressions of Russia, pointing out that the same three devices used by the Government in Germany were used by the Government in Russia, namely, propaganda, compulsion, and fear. "The final authority in Russia, as in Germany lies in a single dictator from whose decisions there is no appeal. The one basic difference between the two countries is that Russia having started without an industrial system, is bending all of its efforts toward the building of one through which to integrate the various aspects of its industrial life, whereas in Germany, where the industrial and economic forces were already highly developed, they have simply been taken over by the state and are used as the medium through which the state compels the individual to adopt its policy.

Mr. Wolf stated that Russia had largely abandoned the communist principle of compensation in accordance with one's needs, and has introduced financial incentives whereby the workers are paid in proportion to their efforts. These devices are used to speed up production and to "discipline" the workers. Those who fail to come up to the standards set are made to feel the disapproval of the authorities. "In Russia, as in Germany, criticism of the State is not tolerated, and therefore the corrective influences of free discusion are not present. In this lies the inherent weakness of both systems, for since the beginnings of history, all records show that powerful groups, as well as individual men, tend to abuse their authority, and that domination is a characteristically human instinct."

ROBERT B. WOLF
Gave Impressions of Europe

● Mr. Wolf concluded his discussion of the Russian situation by pointing out that we had no right to condemn it much as we were opposed to it as applicable to our own American conditions. Russian communism, as well as German fascism were effects, and the scientific attitude was to try to understand the causes that led up to these effects. Each country, he said, seemed to be working out its problems of integration in ways best suited to the temperament of its people, and he pointed out how meaningless it was to combine an infinite number of interrelated economic, industrial, and political force under single words, such as "Communism," or "Fascism," and have these words really mean anything. To fight about them (the words) was certainly extremely unintelligent. "Unless we recognize that words, which are mere tags, or labels for things, have value only when they are capable of being referred to the things for which they stand, we will not be able to extricate ourselves from the destructive emotions that are producing the disintegration of our industrial and economic life."

Mr. Wolf then told of his trip to Finland, Sweden, and Norway, and in some detail related the manner in which the Swedish people have achieved an integration of their industrial and economic life without departing from the democratic principles which we in America believe in so firmly.

He told how the Government encouraged labor, industry, and the consumer to form voluntary groups to deal realistically with their own problems. He told of meeting with the heads of the national labor and employee groups at a conference near Stockholm, where he found them **voluntarily** making laws to govern themselves, and how they conceived it to be their function to make it unnecessary for the government to tell them what to do by entering into agreements to regulate wages, hours, working conditions, etc., throughout the entire country. He explained that "each industry had its own form of self-government, and in addition there is a federation of all the industries into a National Employers Association, and a federation of all the Employees groups into a National Labor Organization." It was obvious, he said, that the leaders of these groups respected one another and "recognized" that each had a function to perform in the national economy. In case of a complete deadlock, the government will, when requested, appoint mediators.

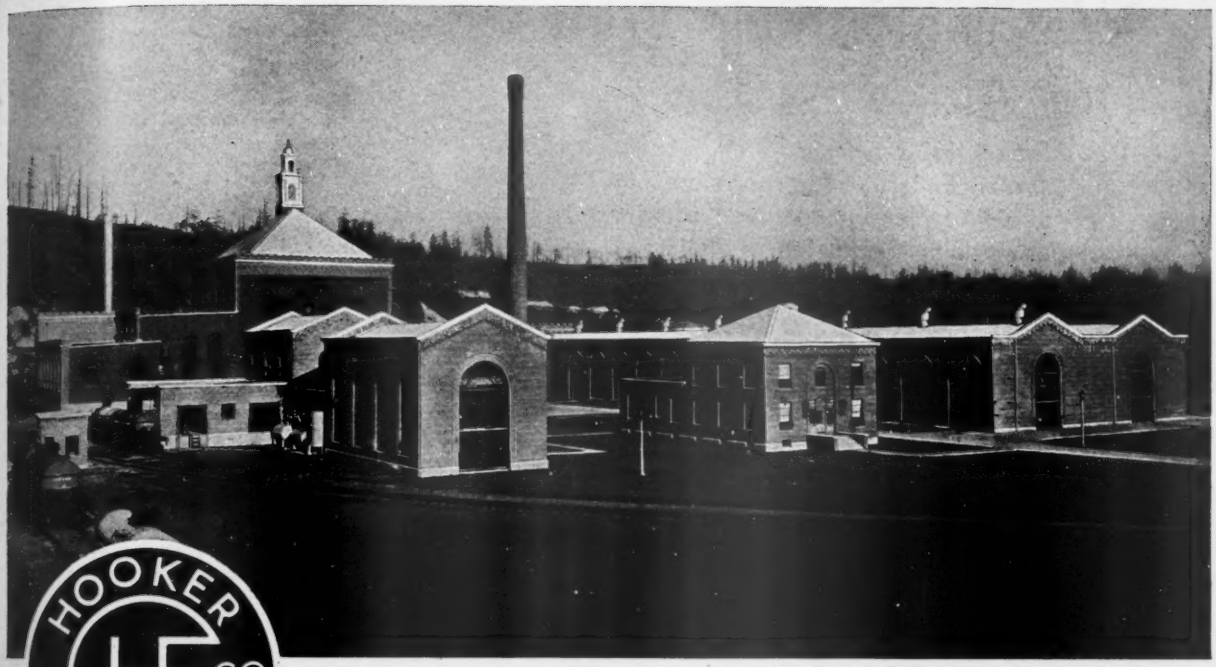
Mr. Wolf went on to explain that the Government encouragement of the Consumer Cooperatives prevented the workers and employers from getting together and exploiting the public, and that whenever this had occurred, as it had in the past in certain industries, the consumer cooperatives would open up factories and so go into competition with private industry, although the consumer cooperatives themselves, in reality were "private" industries, that is, were not owned by "government."

In the Scandinavian countries there was no sign of government propaganda, and no "compulsion" to force conformity to governmental policies. Everyone was free to criticize the government and openly to speak his own mind, and obviously, the government used no secret service in order to inspire fear of consequences if one opposed the government policies.

● Mr. Wolf concluded his talk by pointing out the need to approach our political, social, and economic problems, objectively, that is, to guard against mistaking symbols (words) for realities.

The "sciences," he said are merely symbolic presentations of supposedly verifiable operations. "If each of us approaches his problems from the point of view of obtaining information upon which to reach conclusions, instead of using it to prove his pet theories, it will not be long before forms of government based upon domination of the minds of individuals, will be replaced by government based upon respect for the individual."

He recommended a new book by Stuart Chase, "The Tyranny of Words" as helpful to a better understanding of the nature of the forces at work in the world today.



CAUSTIC SODA
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Appreciating the diversified uses of Caustic Soda and Liquid Chlorine, the Hooker Company offers the technical services of an experienced engineering staff. Mills in the east and south as well as the west have used Hooker service to help solve their operating problems. At Tacoma, Washington, are maintained plant, laboratories, field staff and administrative personnel to serve the west coast industries.

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Source of Chlorine for St. Regis Kraft Company and other paper mills

MURIATIC ACID - BLEACHING POWDER - MONOCHLORBENZENE - PARADICHLORBENZENE
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SULFUR MONOCHLORIDE - SULFUR DICHLORIDE - SULFURYL CHLORIDE - SALT
FERRIC CHLORIDE - ANTIMONY CHLORIDE

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Washington Pulp Wins First Aid Meet

Seven teams from mills of Crown Zellerbach Corporation and Rayonier Incorporated competed at Hoquiam, April 1st

● Teams from seven Washington and Oregon mills of the Crown Zellerbach Corporation and Rayonier Incorporated, met in Hoquiam, Washington, on April 1st in an inter-plant first aid team competition, making a remarkable record in first aid work.

Although three of the teams had been organized only within the past few weeks, all seven finished the contest with a final score of over 90 per cent. This excellent showing was made in a series of four problems, each one of which was of difficult nature.

The Washington Pulp & Paper team emerged victorious with a high score of 98.4 per cent, losing only eight points out of a possible 500. The National Paper Products Company group from Port Townsend gained second place with 96.8 per cent, being discounted only 19 points. This performance was particularly noteworthy in view of the fact that the team had been organized within the past six weeks and had never before been in a competitive match.

Rayonier Incorporated at Shelton was third with 96.2 per cent; Crown Willamette Paper Company Division Crown Zellerbach Corporation, Camas, and Rayonier Incorporated at Port Angeles were tied for fourth, each with 95.4. In fifth place was Rayonier Incorporated at Hoquiam with 93.4, followed by the West Linn team of the Crown Willamette Paper Company Division with 90.6 per cent.

Of these teams, only those from Washington Pulp & Paper Corporation, Camas, Rayonier at Port Angeles and Shelton were experienced. The West Linn and Hoquiam teams which, like the National Paper Product group have just been organized, made a fine showing against their more experienced rivals, their work being exceptionally good.

● The companies are awarding handsome plaques for first and second place, on which the names of team members are being engraved as a permanent record. These were presented at the end of the contest by Jay Olinger, supervisor of industrial insurance for the State of Washington.

The competition was preceded by a banquet with J. W. Bagwill of Rayonier Incorporated at Hoquiam as chairman. Among the guests called on for talks were J. Olinger, Ed Sorger, supervisor of safety and industrial relations for the Washington Department of Labor and Industry, and Fred Pontin, Washington first aid instructor, who acted as referee and chief judge.

A. R. Heron, assistant to the operation committee for the Crown Zellerbach Corporation, spoke to the group on the value of first aid, and expressed appreciation of the state department's cooperation in giving the instruction which made the contest possible.

J. W. Bagwill was chairman in charge of arrangements and publicity. E. P. Read of the Washington Pulp & Paper Corporation and S. W. Grimes of Rayonier Incorporated at Port Angeles, composed the contest rules committee.

First Aid Problems

Problem No. 1—Reading time: 3 minutes; working time: 10 minutes.

Driver is thrown clear of automobile when it crashes down an embankment. When reached the patient complained of pain in right thigh five (5") inches above knee, the foot was turned outward and the patient was unable to move the injured limb (denoting simple fracture of thigh). Blood is oozing from patient's nose and mouth and blood is issuing from a wound two (2") inches long, beginning at center of back of patient's head on a line midway between the ears and running towards top of left ear. The right forearm is fractured about four (4") inches above the wrist, and there is a wound, two (2") inches long across the palm of right hand, bleeding moderately. Patient in state of shock throughout problem. TREAT.

Problem No. 2—Reading time: 3 minutes; working time: 8 minutes.

While painting the outside of a tank, a mill worker falls from scaffold. When found, blood was observed spurting from a wound on inside of left forearm, beginning four (4") inches below bend of elbow extending downwards towards inside of wrist three (3") inches long. Patient complained of severe pain in right side of pelvis. Blood is flowing steadily from cut on right ear, two (2") inches long. There is a wound two and one-half (2½") inches long on outside of right ankle, bleeding moderately. Patient's face is pale, pulse is rapid and weak, he is covered with cold sweat, and answers questions slowly. Immediately after complaining of pain in pelvis, patient becomes unconscious. Treat and prepare for transportation, but do not load on stretcher.

THE WINNERS of the Inter-Plant First Aid Contest at Hoquiam, Washington, April 1st, the WASHINGTON PULP & PAPER CORPORATION team from Port Angeles » » » Left to right, standing, WILL ADAMS, CLAIR McCORMICK, HAROLD HARTMAN » » » Seated, left to right, EARL BAKER, JOHN MONSER, Captain; ERRETT FLEENER and GEORGE HANSEN.

Pulp and Paper First Aid Contest — Hoquiam, April 1, 1938

	Team Numbers						
	1	2	3	4	5	6	7
Discounts Problem No. 1	10	4	0	2	2	9	10
Discounts Problem No. 2	9	6	5	1	5	8	15
Discounts Problem No. 3	4	4	12	1	7	13	11
Discounts Problem No. 4	0	2	6	4	5	3	11
	500	500	500	500	500	500	500
Total Discounts	23	16	23	8	19	33	47
Total Discounts Subtracted from 500	477	484	477	492	481	467	453
Above results divided by 5 to give FINAL SCORE	95.4	96.8	95.4	98.4	96.2	93.4	90.6
	4. Camas	2. N.P.P.Co.	4. Rayinc.-Pt. Angeles	1. W.P.&P.Corp.	3. Rayinc.-Shelton	5. Rayinc.-Hoquiam	6. West Linn

Problem No. 3—Reading time: 3 minutes; working time: 10 minutes.

Lineman working on pole falls twenty (20') feet to ground. Examination revealed blood spurting from a wound on inside of right leg six (6") inches below knee, after cutting away clothing the bone was observed protruding at this point. The left shoulder was rigid and stood off at a distance of about two (2") inches from the body. The shoulder appears flat and there is a marked depression beneath the point of shoulder, which was very painful. Blood is oozing from a wound on left side of face, beginning one (1") inch from corner of mouth and running towards inside of corner of left eye two (2") inches long. The point of left shoulder is skinned over an area of two (2") inches square (no bleeding). Patient is conscious, face is pale and covered with cold sweat. Treat and transport 25 feet on improvised stretcher, return to original position and unload from stretcher.

Problem No. 4—Reading time: 2 minutes; working time: 6 minutes.

Workmen repairing leak in chlorine gas line is overcome, in falling he strikes his head inflicting a wound two (2") inches long across center of forehead (bleeding moderately). The back of the right hand was badly skinned and was swollen considerably, indicating that the bones in hand might be fractured. Patient has been rescued and removed to fresh air, where it is found that he apparently is not breathing. Five members of team give artificial respiration for one minute each, rhythm not to be broken during change of operators after which, it is assumed that patient regains consciousness, and is breathing normally but suffers from shock throughout problem.

Foreign Visitors Inspecting Coast Mills

• During the past month a number of foreign visitors have been on the Coast inspecting Northwest pulp and paper mills. Four from Sweden have visited the pulp division of the Weyerhaeuser Timber Company at Longview and other mills. They are Carl Robert Sahlberg, pulp mill engineer of Skinvik, Sweden; M. V. Thurne of Leje & Thurne, paper and machinery dealers of Stockholm; Ragnar Kempe of Ornskoldsvik, Sweden, and O. Olesen, manager of the Husum mill owned by the Kempe interests.

Another visitor was N. A. Baranoff, chief engineer of "Glavcelulosa," Moscow, U. S. S. R.

Lewthwaite Joins Superintendents

• Norman A. Lewthwaite, pulp mill superintendent for the National Paper Products Division of the Crown Zellerbach Corporation at Port Townsend, Washington, recently became a member of the American Pulp & Paper Mill Superintendents Association.

Spaulding to Run Half Time

• The mill of the Spaulding Pulp & Paper Company at Newberg, Oregon, was down most of the month of March, but resumed operations again March 30. Indications are that for the next quarter the company will operate at about 50 per cent of capacity.

The contract for the new dryers to be installed at the plant has been let to Black-Clawson Company. There will be 52 dryers 36-in. by 102-in. face. These will be used in conjunction with the 16 dryers now in use, and will be decked five high.

An election is being held among the workers of the plant under the supervision of the National Labor Relations Board, to determine what bargain agency shall represent the employees. This is a friendly procedure, in cooperation with the pulp workers' union.

James Wilt, superintendent for the company, recently made a trip east to survey the business situation and to contact the trade. He returned to the plant March 26th.

Gus Buchanan Dies at Appleton

• Gus Buchanan, secretary and one of the original founders of the Appleton Wire Works, passed away at Appleton, Wisconsin, Saturday, April 9. He had been ill since last December. Mr. Buchanan was well known to pulp and paper people on the Pacific Coast, and had traveled through this section a number of times.

Production Ratio Up Slightly

• The American Paper & Pulp Association's weekly production ratio report showed operations of 69.2 per cent of capacity for March against 68.7 per cent in February and 63.9 in January.

All three months in 1937 were above 90 per cent of capacity. In the same period for 1936 the average was around 76 per cent and in 1935 the three months' average was 65.4 per cent.

Pulp Imports Drop In February

• Imports of wood pulp decreased in February as compared with January and with February, 1937. Chemical wood pulp imports for February of this year including all classes, totaled 118,646 short tons valued at $5,314,604. January, 1938, imports were 131,609 short tons of a value of $5,965,308. Imports during February, 1937, totaled 191,204 short tons valued at $7,476,222.

Imports of bleached sulphite and unbleached sulphate underwent noticeable declines in February. Bleached sulphite amounted to 24,578 tons valued at $1,478,610 and unbleached sulphate imports totaled 28,652 tons valued at $1,083,990. Bleached sulphate receipts amounted to 4,334 tons valued at $280,978. Soda pulp imports totaled 1,082 tons for a value of $55,042.

Unbleached sulphite accounted for more than half of the total imports of wood pulp during the month of February this year with 59,995 tons valued at $2,414,658.

February chemical pulp imports were the smallest imports by the United States in any month for almost two years since April, 1936, when imports amounted to but 108,982 short tons.

Puget Sound to Hold Annual Meeting

• The annual meeting of the stockholders and directors of the Puget Sound Pulp & Timber Company will be held at 11 a. m., April 19, in the assembly room of the Herald building in Bellingham, Washington, for the purpose of electing a board of directors and transacting other business.

Paper Box Makers Plan July Convention

• An announcement sent out to members on April 4th by Secretary Hugh Peat of the Pacific Coast Paper Box Manufacturers' Association informed them that President Fred C. Kewell and the directors had decided to hold the association's twenty-fourth annual convention at the Hotel Del Monte, July 11, 12 and 13.

W. H. Thomas of Fibreboard Products, Incorporated, has been named convention chairman by the administration committee. He has accepted and will shortly announce the personnel of his committees.

Last year more than one hundred attended the meeting, the largest attendance in the history of the association.

The program planned for the coming meeting will maintain the high standard set by the 1937 meeting, according to Fred C. Kewell, president of the association.

Complete Merger of Leadbetter Mills

● Merger of the California-Oregon Paper Mills of Los Angeles with the Columbia River Paper Mills has been completed. The southern mill operates under the same name as heretofore, but is a division of the Columbia River company.

Also included in this merger is the Columbia River Paper Mills of Florida, the converting plant at Tampa which has been wholly owned by the parent company. It also retains its former name and operates as a division of the Columbia River Paper Mills.

Byer Moves To Port Angeles

● Conrad Byer, chemist with the Shelton Division of Rayonier Incorporated was transferred the first of April to the company's mill at Port Angeles, Washington.

Pacific Waxed Paper Opens San Francisco Office

● Pacific Waxed Paper Company, Seattle, has opened a branch office at 605 Third St., San Francisco. In charge is William Budd Parsons, vice-president, and, under him, are four men covering the northern California and northern Nevada territory.

Pacific Waxed manufactures a complete line of plain and printed waxed papers and represents Continental Bag Specialty Company of Los Angeles and New York and the Grant Paper Box Company, Pittsburgh, Pa.

Head of Pacific Waxed is A. B. Engle and T. W. Mason is secretary-treasurer. The company was established in Tacoma in 1924 and moved in 1931 to Seattle. It has sales offices also in Portland and Los Angeles.

Working with Parsons in San Francicso are Jim Mulholland, Hal Cassady, Gene McWhirter and E. R. (Ted) Young.

Mr. Engle spent two weeks during April in California conferring with Mr. Parsons and the company's salesmen in San Francisco and Los Angeles.

WILLIAM BUDD PARSONS
Vice-President of
Pacific Waxed Paper Co.

Australians Visit Pacific Coast Mills

● On the lookout for new ideas in pulp and paper making, Sir Herbert Gepp, managing director and W. G. Purdie, general superintendent of mills of the Australian Paper Manufacturers, Limited, visited the United States and Canada during February, March and April, sailing for home from Vancouver, B. C., on the 12th of April. Frank Hunter and J. D. Andrews accompanied the party during the greater part of the trip and returned on the same ship, the Aorangi.

In recent years the Australian Paper Manufacturers, Limited, the oldest and largest paper and board producer in Australia, has sent a number of its executives and operating men to the United States and other countries for the purpose of studying new methods and new equipment. As a result much new equipment has been bought, the larger portion in England due to the Empire trade agreement.

However, the new board machine, cylinder type, which started production around April 1st at the company's Botany mill at Sydney, has a complete Black-Clawson wet end of the latest desing. The dryer was built by Walmsley's Limited of Bury, England. The Botany mill is also equipped with a complete Shartle stock preparation system supplied by the Shartle Brothers Machine Company, division of the Black-Clawson Company.

The Australian Paper Manufacturers, Limited, are now operating a pilot plant kraft pulp mill at Merryvale, Gippsland, in northern Australia 90 miles from Melbourne. This pilot plant has been operating experimentally on the pulping of native eucalyptus by the kraft process. As a result of these experiments the company plans to start construction of a 200-ton kraft pulp mill before the end of this year.

● The company is a large purchaser of wood pulp most of which has been supplied in the past by the Scandinavian producers. It is possible that the Pacific Coast industry may become an important source of supply for both sulphite and kraft pulps inasmuch as less than half the time is required to ship pulp to Australia from the Pacific Coast as from Scandinavia. The Australian Paper Manufacturers do not expect to produce sulphite pulps which are needed in their production of fine papers and patent coated boards.

Landing in San Francisco in February, Sir Herbert Gepp was met by Miss Kathleen Carey of James L. Carey, Incorporated, of Chicago, agent in the United States for the Australian Paper Manufacturers, Limited, and by W. G. Purdie, general superintendent of mills, who had been in England on business for the company. Later they were joined by Mr. Andrews and by Mr. Hunter and the party visited the new kraft mills in the South, went on into eastern Canada, back into the United States at Chicago, visiting a number of board mills, and thence to Vancouver, B. C., and into Washington.

While on the Coast Sir Herbert Gepp was entertained at a luncheon given by J. P. Weyerhaeuser, Jr., executive-vice-president of the Weyerhaeuser Timber Company of Tacoma, which was attended by a number of prominent Northwest business men.

Rayonier Makes Gift to Shelton Hospital

● Rayonier Incorporated in March donated $10,000 to the Shelton General Hospital to pay for the recent construction of a new wing to Shelton's modern institution.

A. B. Govey, president of the Shelton General Hospital Association wrote the following letter of appreciation to Charles H. Conrad, secretary of Rayonier Incorporated in San Francisco:

Dear Mr. Conrad:

Your auditor, Mr. F. R. Pearson, presented to us your check for ten thousand dollars, in response to our appeal through your local manager, Mr. D. B. Davies, for a donation to assist us in financing the addition to our hospital.

We are pleased to say that this contribution will enable us to pay our indebtedness against the addition.

Coming at this moment when your local plant is shut down on account of depressed market conditions, we realize what a magnanimous gift it is to us and this community. At the next meeting of our board of trustees a suitable resolution of appreciation will be adopted and a copy forwarded to you for your records.

On behalf of our board of trustees and the community we serve we wish to convey to Rayonier Incorporated our appreciation for its splendid contribution.

With kind personal regards from the writer, we remain

Yours very thankfully,
SHELTON GENERAL HOSPITAL ASSOCIATION,
By A. B. GOVEY, President.

George Houk's Father Passes in Dayton

● Robert T. Houk of Dayton, Ohio, father of George W. Houk of the Hooker Electrochemical Company in Tacoma, died at his home March 10th at the age of 75 years.

For many years Mr. Houk had been a vice-president of the Mead Corporation and was actively engaged in his work up until a few weeks before he died. His first work after completing his schooling was with the original Mead Company. He was away from the Mead interests for seventeen years during which time he was in charge of sales for the National Cash Register Company in Kansas City, Missouri. In 1913 Mr. Houk returned to the Mead Paper Company as general manager at Chillicothe, Ohio. A short time later Mr. Houk was elected a vice-president and he remained with the Mead Corporation continuously from 1913 until his death.

Powell River Pulp Machine Down

● Powell River Company has temporarily shut down operation of its Kamyr machine owing to decline in the pulp market.

Primary reason for discontinuing production is the Sino-Japanese war which has put Japan out of the market. Several shipmetns of pulp were made to England, but there is not sufficient business from that quarter to justify continued operation.

It is expected that the machine will be back in production again later in the year.

Mekan-i-Kloth, Bleached Kraft Substitute for Wiping Rags

Introduced Recently by the Pacific Coast Paper Mills of Bellingham, Mekan-i-Kloth is Finding a Ready Market Among Service Stations and Industrial Plants

• Mekan-i-Kloth is the coined name of the 100 per cent bleached kraft wiping cloth introduced experimentally several months ago by the Pacific Coast Paper Mills of Bellingham, Washington, makers of M. D. toilet tissue, towels and napkins.

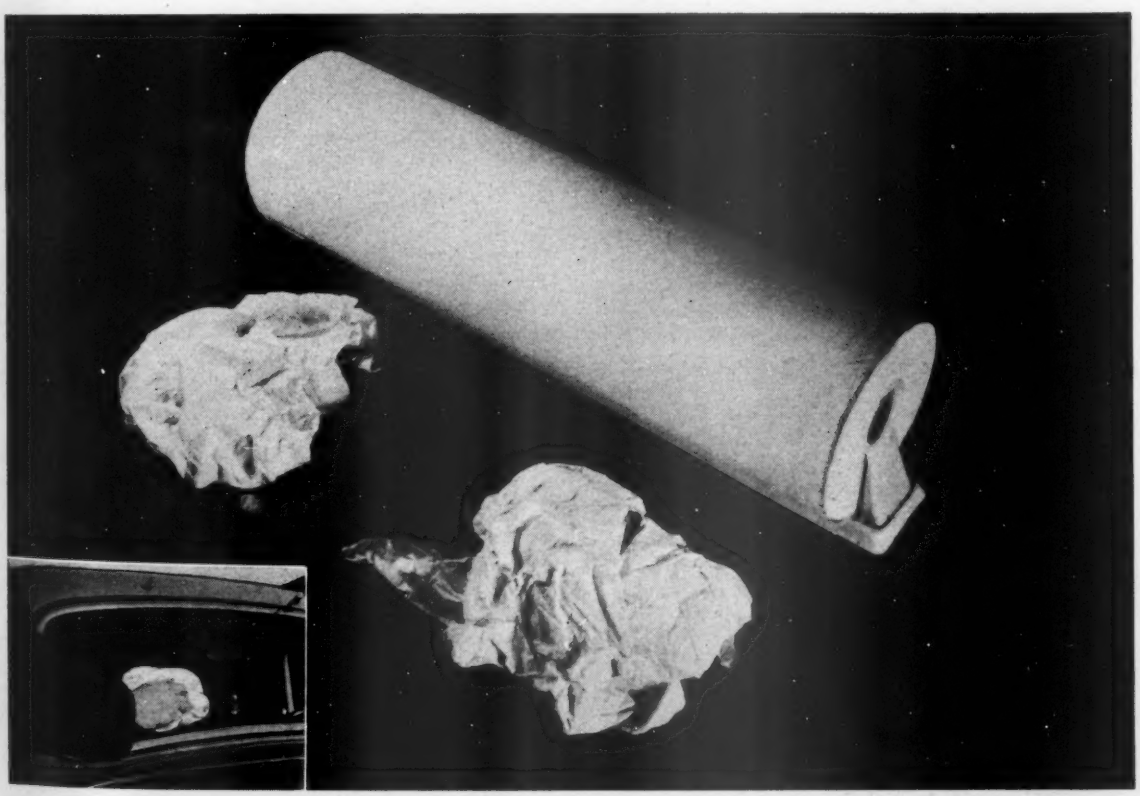
The new product, which is reported to be meeting with ready acceptance among service stations and industrial plants, is produced entirely from bleached kraft pulp made by the St. Regis Kraft Company in Tacoma, Washington.

Absorbent wiping rags are said to be scarce, due in part to the increasing percentage of rayon rags. The rayon rags, being non-absorbent, are unsatisfactory.

Mekan-i-Kloth comes in rolls of 175 sheets, 18 inches wide and perforated every 30 inches. The basis weight is 17 pounds.

Mekan-i-Kloth is highly absorbent and soft as a rag, as will be noted in the photograph which shows the roll and two "kloths" wadded for cleaning use. Service stations are rapidly adopting the new product for cleaning windshields, wiping oil measuring sticks and numerous other uses where they are proving more satisfactory than rags. Industrial plants are discarding wiping rags in favor of the more satisfactory and cheaper Mekan-i-Kloths. One Pacific Coast pulp mill is employing them exclusively and has found they will save a sizeable sum over a year's time. Printers have found them superior in cleaning presses.

The new product was quietly introduced by the Pacific Coast Paper Mills a few months ago, but word of their success has spread resulting in a steadily increasing demand.



MEKAN-I-KLOTH, the 100% bleached kraft substitute for wiping rags, introduced several months ago by the PACIFIC COAST PAPER MILLS of Bellingham, Washington » » » The paper cloth which is soft and absorbent is particularly adaptable to use by service station attendants, factories, printers, etc. » » » It is made of St. Regis Kraft Company's bleached kraft pulp produced from Western hemlock.

Soundview Increases Efficiency, Capacity of Log Breakdown and Chipping Operations

New Chipping Plant Constructed— Flow of Cants Rearranged— Additional Equipment Installed— Result is Cleaner, More Uniform Chips

THE expansion of productive capacity of the Soundview Pulp Company's bleached sulphite pulp mill in Everett, Washington, during the past year and a half, from 200 to nearly 500 tons daily, has necessitated changes in the log breakdown and chipping plants to produce the required volume of clean, uniform chips.

From the time the pulp mill was completed in 1930 up until 1936 no fundamental changes had been made in the log breakdown mill and the chipping plant. In the latter year the original double circular saw head rig was taken out and a 10-foot band mill substituted to increase the speed of the sawing and likewise the production of clean cants for chipping.

Soundview's first new unit began operating in February, 1937, and shortly thereafter preliminary changes were completed in the log breakdown plant to provide additional chip supplies. These changes consisted of the rearrangement of installed equipment in the sawmill and the installation of a new trimmer and two Stetson-Ross barkers.

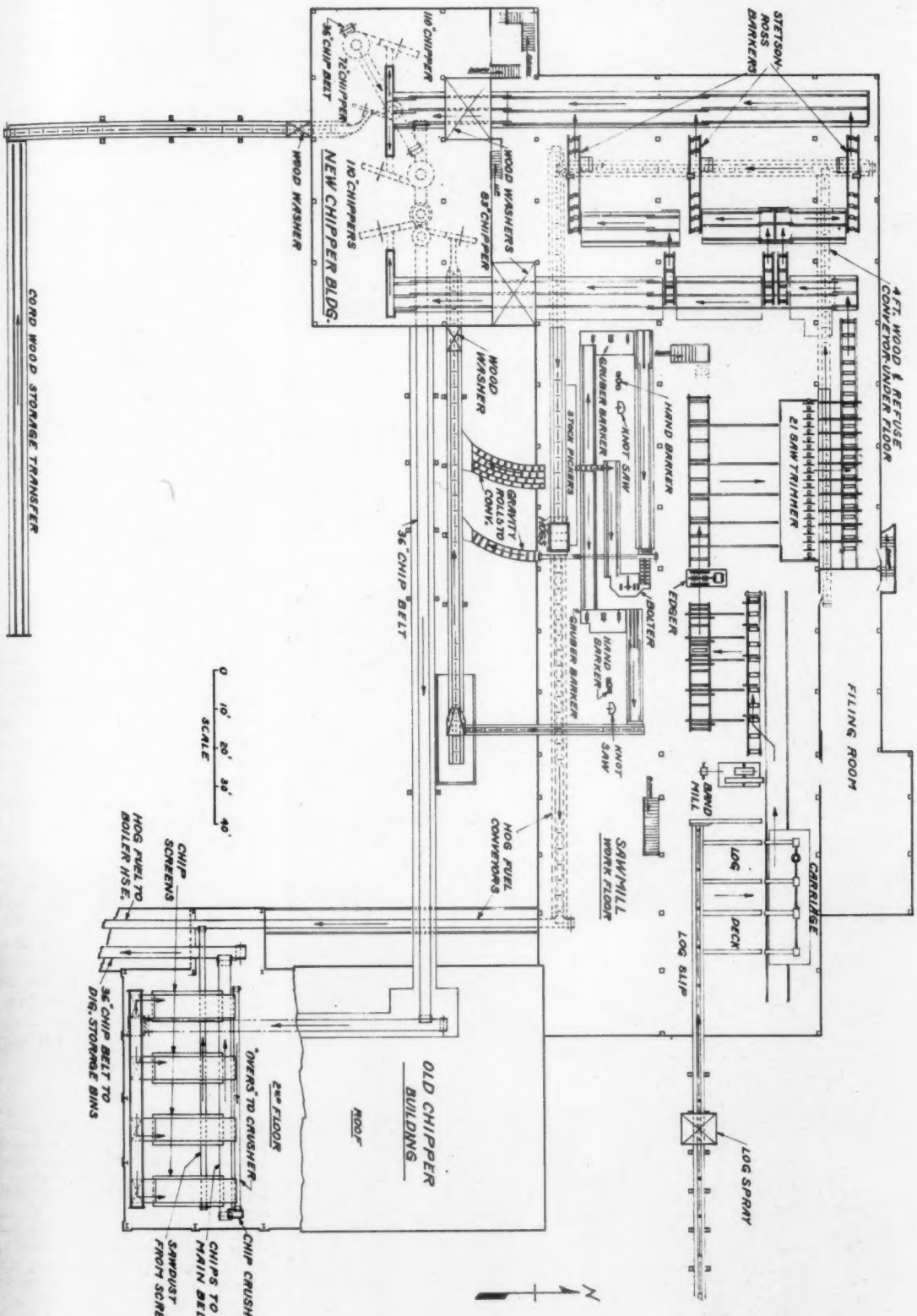
The breakdown plant ran this way until January of this year when the new chipping plant, begun at the end of October, was completed and other changes were made in the sawmill, which brought the average production up to 30,000 board feet, log scale, per hour.

● Early last fall plans were completed by Justin H. McCarthy, resident engineer for Soundview, for a new chipping plant and a revamping of the log breakdown plant. The purpose of the changes was to bring the wood preparation department up to the same level of production and efficiency as the rest of the mill. Since the previous changes had been made in March, 1937, Soundview's third bleached sulphite producing unit (second new unit) had been completed in June, 1937. This third unit brought daily capacity up to around 470 tons of bleached sulphite pulp per day and placed a strain on the wood preparation department.

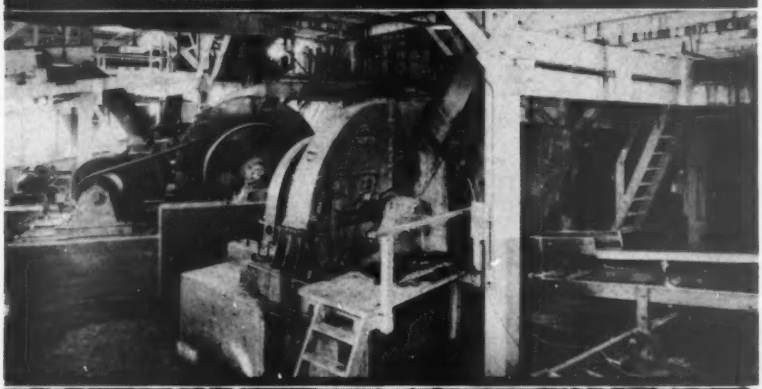
Ground was broken for the new chipping plant on October 28th by the Austin Company, who had been awarded the construction contract.

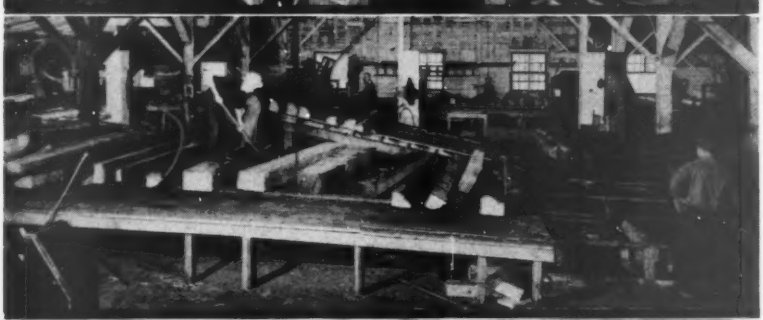
The two sketches, one showing the layout before the recent changes and the other as the plant is today, indicate clearly the improved efficiency of the wood preparation plant at Soundview.

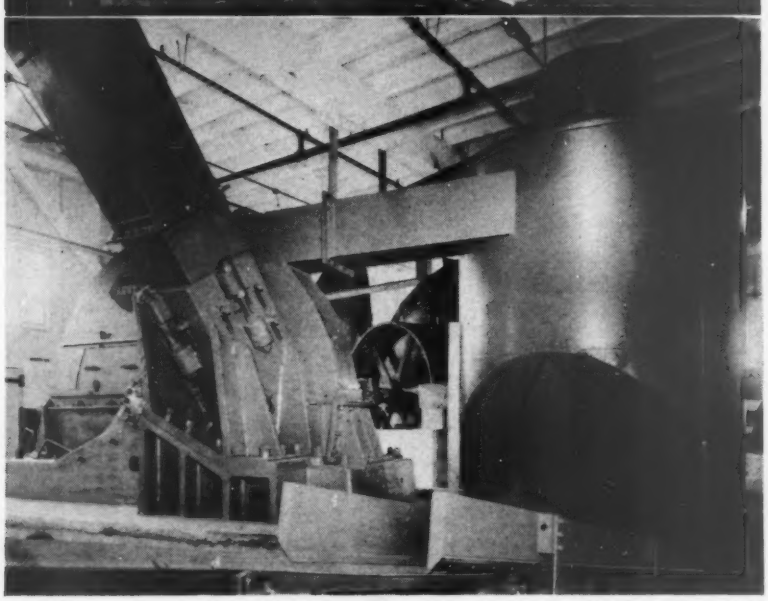
CLEAN CANTS come from the high pressure washing chamber ready for distribution to the two 110-inch chippers » » » The operator distributes the 12-foot cants equally to the chippers by means of the movable roller shown here and described in the article » » » The method is simple and efficient.



The SOUNDVIEW PULP COMPANY'S Log Breakdown and Chipping Plant as of January, 1938 » » » Note improved efficiency of layout, arrangement of equipment and design of the new chipping plant.







From 8 to 12-Foot Cants

One of the principal factors contributing to this improved efficiency is the change from the production of 8-foot cants to 12-foot cants. The two barkers installed a year ago were designed for the greater length as is the new one installed during the latest improvement program.

As the hemlock logs come up the log haul they are subjected to a high pressure washing, the spray completely encircling the logs. By means of booster pumps the pressure has been raised to approximately 200 pounds per square inch, sufficient to remove loose dirt.

● A new Sumner carriage speeds up the sawing. It has four 60-inch opening screw type blocks, and will take a 72-inch log. It is equipped with cast steel knees, Prescott electric dogs, extension and taper devices, and a No. 4 Sumner setworks. Alloy steel axles are employed on the carriage trucks and the carriage runs on unusually heavy rails, 112 pounds set on ⅜ inch by 12 inch steel plates.

From the edger the cants are conveyed to the trimmer where four-foot sections can be cut out to eliminate rot, large knots and other defects. These four-foot pieces drop to a conveyor below the trimmer and are taken to the other side of the breakdown plant, as indicated in the sketches, where they are put through a bolter, Gruber barker or hand barked as their condition may warrant. Clean pieces are picked from the conveyor from the trimmer and thrown onto a roller conveyor which carries them outside to a chain conveyor, through a high pressure washer, and then to an 84-inch KMW chipper, in the new chipping plant. This same outside conveyor, which shows in the sketch and in the photograph is employed for taking 4-foot cordwood into the chipping plant from ground level.

From the trimmer the 12-foot

●

In the top photograph the new chipping plant appears at the left with the new connecting chip conveyor to the screen building at the right. Note concrete paved yard for cordwood storage.

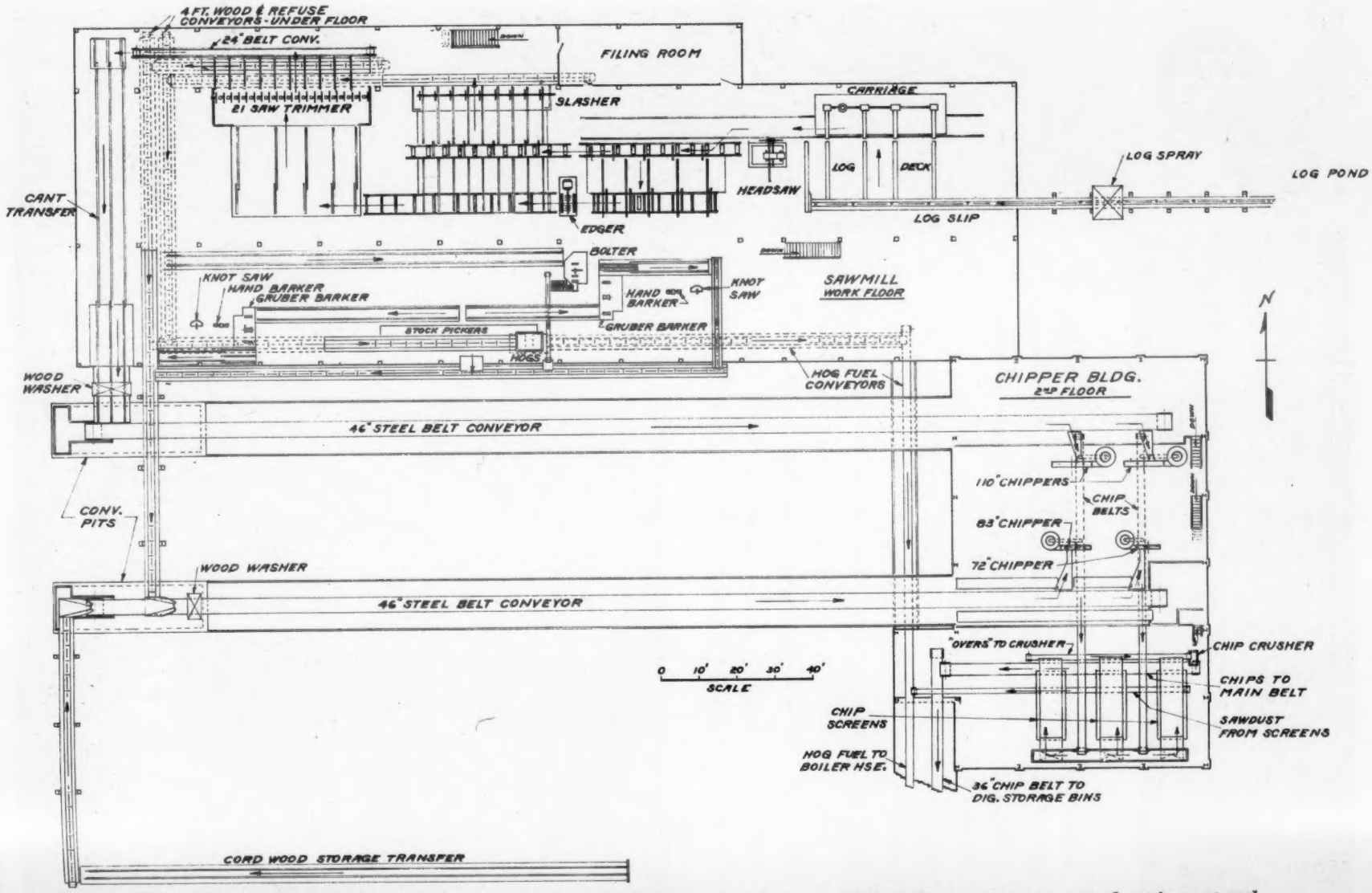
The second photo shows the ground floor of the new chipping plant.

In the third photo the new sorting transfer shows in the foreground with the storage conveyors back of the three Stetson-Ross barkers in the background.

The bottom photograph pictures the new 110-inch Sumner chipper and the cyclone sawdust eliminator designed by the Soundview organization.

AP

The SOUNDVIEW PULP COMPANY'S Log Breakdown and Chipping Plant as of January, 1937, before rearrangement of equipment and construction of the new chipping plant.



The SOUNDVIEW PULP COMPANY'S Log Breakdown and Chipping Plant as of January, 1937, before rearrangement of equipment and construction of the new chipping plant.

cants pass to a transfer conveyor, which is controlled by an operator. He selects those cants that need barking and transfers them to short storage conveyors back to each of the three Stetson-Ross barkers by means of live rolls under the transfer which raise by foot-button control. By this method he can maintain a uniform supply of cants back of each barker.

Clean cants, needing no further work, remain on this main transfer conveyor and are carried through a washing chamber to a 110-inch Sumner chipper in the new chipping plant.

Cants going through the Stetson-Ross barkers are discharged onto another transfer conveyor where defects not removable in the barkers are cut out with axes. This transfer leads through a washing chamber where water is sprayed on all four sides of the cants to remove sawdust and bark particles. This conveyor moves up a slight incline as it passes through the washer. The end is on the second floor of the chipping plant. Here an operator distributes the cants to two 110-inch KMW chippers on the ground floor below.

Original Method of Cant Distribution

● The method of distributing the cants is simple and original and is shown in the photograph. The spouts from the two chippers on the floor below comes up to a V in the center of the cant transfer. The operator simply moves a roll mounted on a carriage and projecting out over the chutes. As he moves it to the right the cant dropping from the conveyor slides down the chute to the left. When he moves it to the left the cant slides into the chipper spout on the right. This system keeps the flow of cants to each 110-inch chipper even and the flow of chips to the screens even, likewise.

Another New Idea

● The 110-inch Sumner chipper discharges overhead into specially designed cyclone which acts as a sawdust eliminator. The design was original with the Soundview organization. As it was experimental only one was built to determine if it would eliminate sawdust and other fines from the chips.

The idea is working out successfully and the other chippers will probably be equipped later on with similarly designed cyclone sawdust eliminators. The upper part of the cyclone cone is perforated steel plate and is enclosed in a steel cylinder.

JUSTIN H. McCARTHY,
Resident Engineer,
Soundview Pulp Company

As the chips whirl over this perforated cone the sawdust, bark and fine bits of wood drop through the holes in the plate, the chips passing downward through the solid part of the cone onto the belt conveyor to the chip screens.

By belt conveyor the chips travel approximately 280 feet to the four chip screens which includes one new Sumner chip screen added to the three shaker screens originally installed. These screens remain in the former chipping and screening building which is now devoted entirely to screening since the chippers have been moved to the new building at the outlet of the breakdown mill.

From the chip screens the chips are discharged, as in the past, onto the belt conveyor going to chip storage above the digesters, and rejects are conveyed to the hogged fuel storage pile along with the other wood refuse from the breakdown mill.

One of the outstanding advantages of the rearrangement in the log breakdown mill proper was the enlargement of the transfer conveyors to handle 12-foot cants instead of but 8-foot cants as in the past. This change has contributed much to the increased capacity of Soundview's breakdown plant, which now has a rated capacity of around 30,000 board feet, log scale, per hour.

● The slow moving steel belt conveyors previously employed for conveying cants from the outlet of the breakdown plant to the chipping plant some 260 feet away, have been eliminated. These conveyors proved to be bottlenecks when the breakdown plant was speeded up to produce the larger quantity of chips needed by Soundview's expanded bleached sulphite pulp mill.

Of the five chippers one is new, a 110-inch Sumner direct connected to a 250 horsepower General Electric synchronous motor operating at 200 rpm on 2200 volts. Three chippers are 110 inches, one 84 inches and one 72 inches.

The only 110-inch chippers were completely rebuilt in 1937 by the Sumner Iron Work of Everett and the 84-inch chipper was rebuilt early this year. These chippers were equipped with anti-friction bearings, including an anti-friction thrust bearing, which permits takeup to compensate for wear. Uniform chip length can thereby be maintained. Removable wearing plates were applied to the discs together with new knife carriers and new arbors.

The one new Stetson-Ross cant barker is a duplicate of the other two. It is a No. 43, ring type log section barking machine for handling 12-foot wood. A 75 horsepower electric motor drives at 3600 rpm the 3-knife concave barker head assembly, which is of extra heavy construction. The James Brinkley Company of Seattle furnished belt and chain transfer equipment and rubber conveying belts with the exception of the outside round link 4-foot wood conveyors, which are of manganese steel and were supplied by the Electric Steel Foundry Company of Portland.

Swedish Pulp Mill Shows Expanded Production

● The statement for 1937 of Wifstavarfs, A. B., Swedish pulp producing concern, showed large increases in sulphite and sulphate pulp production over 1936, 1935 and 1934. In the latter year the company produced 56,350 metric tons of sulphite pulp. This increased year to year until 1937 production of sulphite amounted to 70,650 tons, an increase over 1934 of 14,300 tons.

The 1934 sulphate pulp production of Wifstavarfs totaled 38,850 metric tons as compared with 44,300 tons in 1937, an increase of 5,450 tons. The sulphite production last year is said to represent full capacity but the sulphate mill capacity is reported to be around 50,000 metric tons annually.

Bill Kay Leaves Camas

● William Kay, chemist in the Camas laboratory of the Crown Willamette Paper Co., division of Crown Zellerbach Corporation, left April 15 to go into chemical consultant work in San Francisco.

For better groundwood pulp at lower cost, rely on this precise, automatic Temperature Control System . . .

YOU get bigger production when grinding temperatures are exactly controlled. You get greater tensile strength in the stock. You avoid fluctuations in stock freeness and color. And there's far less danger of the grinding stone's surface shelling.

Here's what automatic control of grinding temperature by Taylor has done in different mills, according to actual records. What would these results mean in *your* mill?

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Taylor Control Systems are adaptable to all grinders—pocket, semi-magazine, caterpillar and hydraulic magazine. Let Taylor engineers tell you more about them. Let them also tell you about Taylor Systems for recording liquid level in the digester, for indicating calender roll pressure and for recording beater roll pressure. These are trouble-savers and money-makers also.

See a Taylor representative. Or write Taylor Instrument Companies, Rochester, N.Y. Plant also in Toronto, Canada. Manufacturers in Great Britain—Short & Mason, Ltd., London, England.

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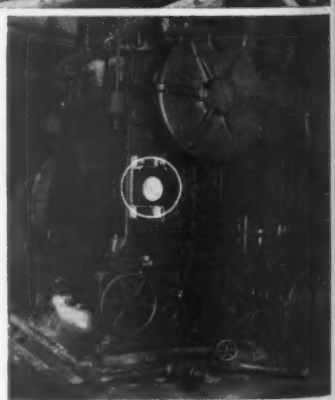

FOR ALMOST FOUR YEARS Taylor Control has precisely regulated temperatures for these caterpillar type grinders. Indicated by white circle is a Taylor Fulscope Recording Controller, brains of Taylor Control Systems. These systems control temperatures for pocket, semi-magazine and hydraulic magazine grinders as well as for the caterpillar type.

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The Use of Caustic Soda In the Bleaching of Wood Pulp

by GEORGE E. SCHMIDT, BRIAN L. SHERA and T. W. TOOVEY*

Abstract

A study to determine effects obtainable through use of caustic soda in the bleaching of pulp.

Introduction

IN these experiments, three West Coast pulps made from Western hemlock were studied.

1. Kraft pulp of moderate bleachability.
2. Sulphite of high bleachability.
3. Sulphite of low bleachability.

The study was conducted to determine the value of caustic soda in the refining of these pulps. The pulps were first chlorinated so that practically all chlorine was consumed in one hour retention period. The chlorinated pulp was thoroughly washed in the acid state and then neutralized to pH of 7.1 to 7.2 with caustic soda in order to have all chlorinated pulp samples in the same neutral state for further treatment. Causticizing was conducted at various concentrations, temperatures and consistencies for a period of one hour.

This pulp was washed free of excess caustic soda and bleached with calcium hypochlorite. So that results derived from the caustic treatment would remain paramount usually no attempt was made to bleach to a high white color. In the bleaching stage, the bleachability was determined by the permanganate method of Wiles and only the equivalent amount of chlorine as hypochlorite was added. The bleaching action was stopped in about three hours or at a point where the residual chlorine was ¼% to ½%. Since there was no excess chlorine added, the bleaching action was mild and the variations derived from caustic soda treatment of the pulp were in evidence in the final product.

*GEORGE E. SCHMIDT, Chemist, Pennsylvania Salt Manufacturing Company of Washington, Tacoma, Washington; BRIAN L. SHERA, Service Engineer, Pennsylvania Salt Manufacturing Company of Washington, Tacoma, Washington, and T. W. TOOVEY, Pennsylvania Salt Manufacturing Company, Philadelphia, Pennsylvania. Presented at the annual meeting of the Technical Association of the Pulp and Paper Industry, New York City, February 21st to 25th, 1938.

Laboratory Methods

● Methods of testing used were as follows:

Bleachability. The permanganate method by Wiles.

pH. By means of an instrument equipped with glass and calomel electrodes.

Residual Chlorine. The residual chlorine remaining in the chlorination or bleaching stages was determined by the usual method employing sodium thiosulphate, acid, potassium iodide and starch indicator.

K Number. This is an arbitrary designation given to a method used in determining the dissolved organic matter or incrustants to be found in solution at any time during the chlorination, causticizing or bleaching stages. It appears to offer a means of gauging the speed or completeness of a pulp refining action but as yet it has not been fully developed to determine quantitatively the dissolved incrustants in terms of lignin, etc. However, the number increases proportionately with the effectiveness or completeness of the refining action. The number is determined by the reducing action of an aliquot portion of the solution surrounding the pulp on a standard permanganate solution. The figures in this article express the c.c. of 0.1N KMn04 reduced by the incrustants removed from one gram of pulp.

Mullen Test. The beating was carried out according to T. A. P. P. I. standards. The Mullen sheets were dried on a hot plate and popped immediately. The tests are based on a ream size of 24"x38" by 480 count.

Tear Test. Run on the Elmendorf tear tester under standard conditions of temperature and humidity. The results are reported as grams/lb./ream.

Fold Test. Run on the M. I. T. fold tester under standard conditions of temperature and humidity. The results are based on double folds, M. I. T.

Freeness. Run under standard conditions on a Schopper-Riegler Freeness Tester.

Chemical Analyses. Standard T. A. P. P. I. methods were employed for determining alpha cellulose, copper number, viscosity and ash content.

Color. The pulp colors were determined on standard color wheels.

Pulp Refining Procedure

● All of the pulps were received in sheet form from the manufacturers and weighed into equal portions for treatment. The air dry basis was used throughout except where noted otherwise. The pulp sheets were soaked and thoroughly disintegrated. The procedures used on the pulps were as follows:

1. Kraft Pulp. Bleachability 8.60%. 6.0% chlorine was added over a period of 25 minutes to the pulp suspension at 3% consistency and 65% F. After the chlorine was added, the reaction was allowed to proceed 60 additional minutes.

Time	% Chlorine Consumed	K Number	pH
0			
25	5.13	5.7	1.70
40	5.57	8.7	1.60
55	5.75	11.6	1.56
70	5.79	-----	1.57
85	5.85	14.0	1.55

Washing. Washed in acid state on suction box. Three washes of 2.5 gallons per pound. Total water 7.5 gallons per pound. Temperature 50° F. pH of washed pulp 3.7. Bleachability, 3.60%.

Neutralizing. Temperature 50° F. NaOH added 0.37%. pH raised to 7.1. Bleachability 3.37%. Pulp not washed.

Causticizing and Bleaching. See Table I.

Washing. Same as the chlorinated pulp.

● 2. Hard Sulphite Pulp. Bleachability, 6.60%. 4.64% chlorine was added during a 25 minute period and allowed to react an additional 60 minutes. Consistency 3.0%. Temperature 60° F.

TABLE 1
TABULATION OF PULP TREATMENTS AND TESTS

TYPE OF PULP	TEST No.	CAUSTICIZING STAGE 1 Hour							BLEACHING STAGE								CHEMICALS APPLIED			PHYSICAL AND CHEMICAL TESTS									
		% Consistency	Temp. °F.	Final pH	Final "K" No.	% Na OH Added	% Na OH Consumed	Bleachability After Causticizing	Time Hours	Temp. °F.	% Consistency	Final pH	Final "K" No.	% Na OH Added	% Cl_2 Added	% Cl_2 Consumed	% Chlorine	% Caustic Soda	% Total	Max. Mullen	Time Min.	At Max. Mullen: Freeness	At Max. Mullen: Tear gm/lb/ream	At Max. Mullen: Fold M.I.T.	Ash %	Color (Std. Wheel)	Copper No.	% Alpha Cellulose	Viscosity Cps.
Kraft	Unbleached																			190	100	418	3.35	3877	0.542		0.62	92.42	72.6
	A	9	77	9.7	4.6	0.50	0.48	3.09	3.0	90	12.0	7.7	6.7	0.74	3.09	2.72	9.09	1.61	10.70	157	60	475	2.58	1350	0.609	79	2.54	87.25	11.6
	B	9	77	10.5	4.6	1.00	0.95	2.89	3.5	90	12.0	7.9	4.3	0.81	2.89	2.39	8.89	2.18	11.07	161	80	490	2.41	1758	0.613	80	1.75	86.76	12.9
	C	9	77	11.7	5.1	2.00	1.85	2.79	3.0	90	12.0	7.8	4.7	1.03	2.79	2.34	8.79	3.40	12.19	167	60	490	2.51	1800	0.754	81	1.26	88.74	15.8
	D	9	104	9.2	5.3	0.50	0.49	2.71	3.0	90	12.0	7.8	4.3	0.88	2.71	2.17	8.71	1.75	10.46	174	60	430	2.61	1900	0.560	78	1.38	88.85	13.9
	E	9	104	9.6	7.5	1.00	0.99	2.55	3.0	90	12.0	7.7	5.4	0.88	2.55	2.18	8.55	2.25	11.80	164	60	615	3.12	1915	0.586	80	1.16	89.25	16.7
	F	9	104	11.7	8.8	2.00	1.91	2.43	3.0	90	12.0	7.7	5.2	0.88	2.43	2.08	8.43	3.25	11.68	154	60	730	2.84	1865	0.527	80	1.12	89.24	14.8
	G	9	140	7.4	7.5	0.50	0.50	2.91	3.0	90	12.0	7.8	4.9	1.18	2.91	2.54	8.91	2.05	10.96	158	60	800	2.71	1768	0.599	80	1.12	89.26	19.5
	H	9	140	9.8	8.6	1.00	0.99	2.43	3.0	90	12.0	7.7	4.7	0.88	2.43	2.10	8.43	2.25	10.68	166	80	557	2.72	2614	0.467	82	1.11	89.50	17.8
	I	9	140	11.8	10.3	2.00	1.87	1.94	3.5	90	12.0	7.8	3.8	0.74	1.94	1.61	7.94	3.11	11.05	169	80	530	3.00	2534	0.384	82	0.92	90.00	17.5
	J	15	77	9.8	6.3	1.00	0.93	2.31	3.0	90	12.0	7.9	4.2	0.81	2.31	1.92	8.31	2.18	10.49	173	80	696	2.65	2505	0.384	81	1.05	88.25	15.5
	K	15	77	11.4	8.3	2.00	1.46	2.17	3.0	90	12.0	8.0	3.7	0.88	2.17	1.77	8.17	3.25	11.42	160	80	609	2.73	2579	0.314	83	0.95	89.13	20.4
	L	15	104	9.8	8.7	1.00	0.94	2.11	3.5	90	12.0	7.9	4.8	0.74	2.11	1.78	8.11	2.11	10.22	168	80	591	3.08	2640	0.294	83	0.97	90.00	15.8
	M	15	104	11.4	9.5	2.00	1.48	2.25	3.5	90	12.0	7.7	3.5	0.74	2.25	1.86	8.25	3.11	11.36	162	80	594	3.22	2800	0.242	84	0.95	89.50	18.2
	N	15	140	9.5	10.2	1.00	0.96	2.11	3.0	90	12.0	8.3	3.8	0.81	2.11	1.77	8.11	2.18	10.29	172	80	633	2.58	2919	0.289	85	0.84	88.70	18.1
	O	15	140	11.7	11.4	2.00	1.40	1.71	3.5	90	12.0	8.9	3.5	0.59	1.71	1.36	7.71	2.96	10.67	183	80	640	2.70	2944	0.205	85	0.92	89.97	19.5
	P			Neutralized Only				3.37	1.5	90	12.0	8.7	9.2	1.77	3.37	3.02	9.37	2.14	11.51	171	80	588	2.92	2430	0.268	80	0.97	89.72	19.5
	Q			Neutralized Only				3.37	1.5	90	12.0	3.5	9.1	0	3.37	3.36	9.37	0.37	9.74	142	80	354	2.19	978	0.265	73	4.53	78.85	6.8
	R			Multistage Bleaching																151	100	340	1.82	2840	0.208	88	1.19	89.24	16.5
Hard Sulphite	Unbleached																			118	60	620	2.27	2703	0.331		2.02	89.50	72.4
	S			Neutralized Only				0.79	1.5	80	14.0	6.9	1.0	0	0.79	0.51	5.43	0.06	5.49	119	50	764	3.03	1587	0.168	81	2.42	88.65	30.5
	T			Neutralized Only				0.79	2.2	80	14.0	7.7	1.5	0.46	0.79	0.51	5.43	0.52	5.95	123	50	772	2.67	1521	0.176	90	1.84	89.45	37.6
	U	15	140	9.0	3.0	0.50	0.49	0.30	2.2	80	14.0	7.8	0.4	0.07	0.30	0.22	4.94	0.63	5.57	120	50	802	2.81	1062	0.154	91	1.79	89.85	41.5
	V	15	140	11.1	3.6	1.00	0.67	0.22	2.2	80	14.0	7.9	0.3	0.09	0.22	0.17	4.86	1.15	6.01	123	50	755	3.01	952	0.158	92	1.74	90.20	48.5
Soft Sulphite	Unbleached																			111	60	647	2.22	580	0.206			90.31	86.1
	W	8	180	11.3	13.3	1.50	1.46	0.79	3.0	77	15.0	9.2	1.5	0.49	0.79	0.62	3.34	2.01	5.35						0.158	93	1.27	91.90	36.6
	X	8	180	11.7	9.1	2.00	1.90	0.83	2.0	77	15.0	8.4	1.6	0.19	0.75	0.55													
						Second Stage Bleach			3.0	80	8.0	7.9	0	0	0.17	0.07	3.47	2.21	5.68						0.145	92	1.47	89.82	40.3

Time	% Chlorine Consumed	K Number	pH
0			
25	3.90	34.4	1.65
40	4.28	37.3	1.80
55	4.33	37.3	1.75
70	4.40	38.5	1.75
85	4.49	40.0	1.75

Washing. Washed in acid state on suction box. Three washes of 2.3 gallons per pound or total water consumption of 7.5 gallons per pound. Temperature 50° F. Bleachability 0.88%.

Neutralizing. Temperature 50° F. NaOH added 0.06%. pH raised to 7.2. Bleachability 0.79%. Pulp not washed.

Cauticizing and Bleaching. See Table I.

Washing. The same method as the chlorinated stock.

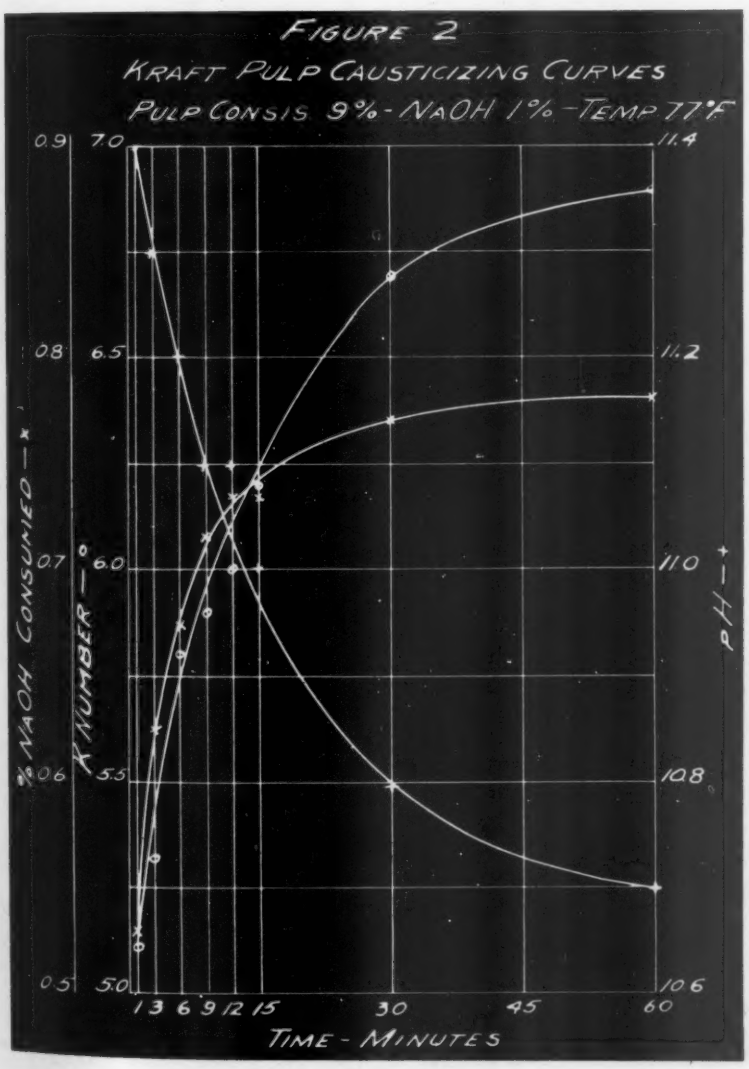
• 3. Soft Sulphite Pulp. Bleachability 3.64%. 2.55% chlorine added during a 25 minute period and allowed to react an additional 60 minutes. Consitency 3%. Temperature 68° F.

Time	% Chlorine Consumed	K Number	pH
0			
25	2.44	23.9	1.85
40	2.48	23.9	1.80
55	2.49	24.3	1.80
70	2.50	25.9	1.80
85	2.51	28.3	1.80

Washing. Washed in acid state on suction box. Three washes of 2.5 gallons per pound or total water consumption of 7.5 gallons per pound. Temperature 50° F. pH of washed pulp 6.6.

Neutralizing. Temperature 50° F. NaOH added 0.02%. pH raised to 7.1. Bleachability 1.65%. Pulp not washed.

Cauticizing and Bleaching. See Table I.



Washing. Same method as the chlorinated pulp.

Discussion

• In general it may be said that these experiments showed that the use of caustic soda improved the physical and chemical properties of the pulp tested. The consumption of caustic soda reduced the consumption of chlorine and improved the final product.

A study of this experiment (see Fig. 1) indicates that a caustic soda treatment of between 1% to 2% on Kraft and 0.5% to 1% on Sulphite in the cuasticizing stage at moderate temperature and high consistency produced a pulp of higher color and quality. Note Kraft tests K to O and Sulphite tests U and V. On Kraft pulp it appeared that a density of 18% was preferable to medium density of 9%, in the causticizing stage. The ash content dropped appreciably in the high density causticizing and in all cases showed a decrease from the unbleached pulp in both Kraft and Sulphite. The value was lower with increased temperatures and with increased caustic dosage. The copper number was lowered with each increase of temperature or caustic dosage. The color, freeness, fold, copper number, alpha cellulose and viscosity also showed generally improved values. See Tests J to O.

The bleached Kraft and Sulphite pulps all showed increased freeness when compared to the unbleached pulp.

The Mullen tests compared with the unbleached sample, show a slight increase in the case of the Sulphite pulp and a loss of 25-30 points in the case of Kraft pulp. The variation of the Mullen in relationship to the caustic concentration and temperature are not sufficiently marked to draw definite conclusions in these tests.

However, previous work has shown that an increase in Mullen in the finally bleached pulp can be expected with moderate temperatures and caustic concentrations.

On Sulphite the tear showed a general increase with the caustic concentration.

The fold on Kraft pulp showed a definite improvement with increased caustic concentration and temperature, whereas on Sulphite, the fold decreased with increased caustic treatment.

The alpha cellulose content of the Kraft pulp showed a slight corresponding increase with increased temperature and caustic treatment.

The hard Sulphite exhibited a linear increase in alpha cellulose with increased caustic treatment. Test W in the soft Sulphite shows a high alpha cellulose content and good color easily attained by caustic treatment.

The viscosity of the Kraft pulp was higher in tests where temperatures and caustic concentrations were increased. The viscosity of the Sulphite pulps was higher with increased caustic concentration at the same temperature. Kraft pulps are generally conceded to have lower viscosity than Sulphite pulps when given the same degree of refining.

Some of the tests from this experiment require special discussion.

Test P was chlorinated, washed and neutralized only. It was not given a causticizing treatment, but sufficient caustic soda was added in the bleaching stage to maintain an alkaline condition throughout the bleaching operation. A product resulted which was generally inferior to the causticized pulps, in spite of the greater amount of chemicals consumed in comparison to Tests K to O.

Test Q was chlorinated, washed and neutralized only. No caustic soda was used in the bleaching stage with the result that the pH dropped far into the acid range. The final product was very low in color and tests showed the physical and chemical characteristics were adversely affected.

Test R resulted in a high color obtained by chlorination, causticizing and two bleaching stages. Other characteristics were generally inferior to those found in some of the other tests.

Test S is a Sulphite pulp chlorinated, washed and neutralized. No caustic soda was used in the bleaching stage which allowed the pH to pass slightly to the acid side at the end of the bleaching. The color was very low, but the other qualities were not greatly impaired.

Test T was the same as Test S except that caustic soda was used to maintain an alkaline pH during bleaching. A pulp of excellent color and quality was obtained though not as good as U of V, which were given a separate causticizing treatment.

Test X, soft Sulphite, with the stronger caustic treatment and two stage bleaching, did not measure up to expectations when compared to test W. Since X shows a slightly higher bleachability after causticizing and lower color and alpha cellulose but higher copper number after bleaching, it might be assumed that the pulp was adversely affected at two points.

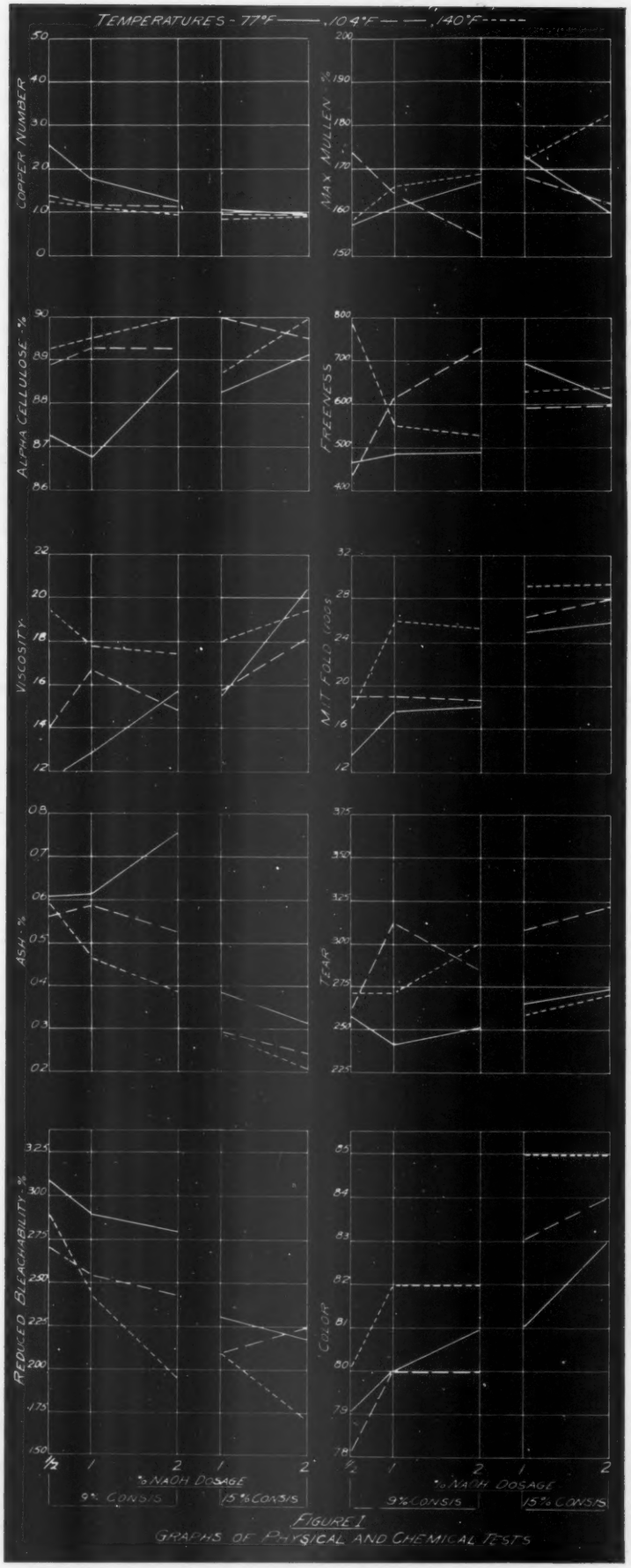


FIGURE I
GRAPHS OF PHYSICAL AND CHEMICAL TESTS

1. Too much air might have been present during the high temperature causticizing.

2. The excess bleach liquor used in the two bleaching stages might have had something to do with it.

Interesting observations were made during the causticizing treatments which are clearly illustrated in Figure 2. The speed of the reaction of the caustic soda with the neutralized pulp is very rapid, giving a steep reaction curve during the first few minutes similar to the curves plotted on the chlorination of pulp. Even though the caustic consumption after ½ hour is negligible, the K number continued to increase and the pH to decrease up to 1 hour. It would seem that a secondary reaction continues independent of the consumption of caustic soda.

Acknowledgement

• The authors make grateful acknowledgement of the cooperation received from the British Columbia Pulp & Paper Co., Vancouver, B. C.; St. Regis Kraft Company, Tacoma, Washington; Soundview Pulp Company, Everett, Washington; and the Pulp Division, Weyerhaeuser Timber Company, Everett and Longview, Washington.

Camas Golfers Plan Busy Year

• Members of the Crown Willamette Golf Association, Camas, Washington, opened their 1938 season on April 8 with golf and a dinner meeting at the Washougal Golf Club. This was their first gathering since the close of the 1937 season last September.

Nearly 60 were present to lay plans for the spring tournament, and to welcome 15 new members of the group. The association has two tournaments each year, spring and fall. The spring matches are to start on May 1, to continue until all matches have been played. This year the one week limit rule will be in effect for each round after the first one.

At this first session club funds were swelled by a raffle of golf balls among the members. They were donated to the association by Wm. C. Marshall of the Pacific Coast Supply Co.

President of the association is Harry Clark, and Vice president is Hugh Mason. Bruce Dodds is secretary-treasurer and Lynn Morgan is director. Lawrence Blair is chairman of the tournament committee and Andrew Catto heads the handicap committee.

National Trust Asks $27,500 From Port Mellon

• The National Trust Company, Ltd., applied to the Supreme Court of British Columbia the latter part of March for confirmation of a recommendation of Registrar J. F. Mather that it be allowed $27,500 remuneration for its administration as trustee for the bondholders of Vancouver Kraft Company, Ltd. The National Trust Company, Ltd., retired from its trusteeship more than a year ago and began proceedings to have its administration approved and its remuneration fixed. Of the $27,500 recommended by the registrar, the National Trust Company, Ltd., is reported to have already received $5,500.

The Vancouver Kraft Company, Ltd., and the Montreal Trust Company, the new trustee, opposed the recommendation of the registrar.

Lathrop Returns From Trip

• Dr. E. C. Lathrop, research director for the Crown Willamette Paper Company, division of Crown Zellerbach Corporation, returned to Camas April 1 after a trip of several weeks in the midwest. Dr. Lathrop spent some time at the Institute of Paper Chemistry at Appleton, Wisconsin, and also visited the mills of the Marathon Paper Mills Company, Mosinee Paper Mills Company and the Kimberly-Clark Corporation.

Wertheimer Elected Commodore

• R. S. Wertheimer, secretary-treasurer and resident manager of the Longview Fibre Company, Longview, Washington, was recently elected commodore of the Longview Yacht Club.

Careys Visit Los Angeles

• Mr. E. J. Carey, manager of the Columbia River Paper Company of Vancouver, Washington, and Mrs. Carey, were the guests of Mr. and Mrs. G. S. Brenzel in Los Angeles early in March.

Report Damage to Chinese Paper Mills

● The American Commercial Attache in Shanghai has reported the results of a brief survey of the damage done to Chinese paper mills by the hostilities in China.

Pao Shan Paper Mill, Chapei, Shanghai: Office building destroyed by gun fire. One boiler damaged through fall of chimney. Machinery said to be intact.

Imperial Paper Mill, Lunghwa, Shanghai: The wet end of one machine was bombed at the beginning of hostilities. All machinery was moved to Hankow before the fall of Nantao to Japanese. Understand they have no intention of having the machinery erected at Hankow.

Great China Paper Mill, Woosung, near Shanghai: Mill completely destroyed by gun fire.

Tien Chang Paper Mill, Pootung, Shanghai: Mill now in the hands of Japanese who turned it into a Japanese headquarters.

Tien Chang Paper Mill, Yangtsepoo, Shanghai: Mill not operating for past year and half. Now in the hands of Japanese.

Kincheng Paper Mill, Shanghai: Mill operating half time as demand for strawboard small.

Kiangnan Paper Mill, Chapei, Shanghai: Partly destroyed.

Shanghai Paper Mill, Chapei, Shanghai: Completely destroyed.

Ming Foong Paper Mill, Kashing, Chekiang Province: Destroyed.

Wha Foong Paper Mill, Hangchow, Chekiang Province: Destroyed.

Wah Cheng Paper Mill, Soochow, Kiangsu Province (60 miles from Shanghai): No news but in Japanese hands.

China Fibre Container Co., Yangtsepoo (American): Operating.

Ching Wah Strawboard Mill, Tientsin, North China: No news.

Wah Shing Paper Mill, Tsinanfu, Shantung Province: No news.

Sun Kee Paper Mill, Nantao, Shanghai: Not destroyed.

Additions to Swedish Wood Pulp Production

● A number of changes and additions have been announced in Swedish pulp and paper mills over the past few months. One of the largest pulp producers in Sweden, Mo. & Domsjo A/B, has announced that a bleaching unit will be added to its sulphite mill at Hornefors to be completed by the end of 1938. This will add 45,000 metric tons per year to the bleached sulphite capacity.

The bleaching unit at the Norrusundet sulphate mill of the Kopparfors A/B has been enlarged from 20,000 to 40,000 metric tons annually, enabling the company to bleach the mill's entire output when desired.

A sulphite mill with an annual capacity of 6,000 tons of strong sulphite has been built at the Langed mill of Billingsfors-Langed A/B. The output from this mill will be utilized by the company's newsprint mill, which at the same time has been rebuilt and made more up to date.

A new mill for the manufacture of kraft paper is being constructed on Store Essingen Island, close to the city of Stockholm. (Office of the American Attache, Stockholm.)

Swedish Pulp and Paper Exports Decline in January

● Exports of wood pulp and paper from Sweden in January, 1938, were below those of January, 1937, except for bleached sulphite, which showed an increase, according to export figures appearing in the February 28th issue of Svensk Pappersmasse-Tidning.

The exports of bleached sulphite pulp for January, 1938, were 33,864 metric tons (metric ton, 2,204.6 pounds) compared with 29,019 metric tons in January of 1937, an increase of 4,845 tons.

Other pulp exports all showed declines in January, 1938, against the same month in 1937. Unbleached sulphite in January of the year totaled 69,558 metric tons, exported. In January, 1937, the exports of unbleached were 78,621 metric tons. The decline was 9,063 metric tons.

Bleached kraft pulp exports from Sweden showed little decline January, 1938, being 5,314 against 5,582 in the same month of 1937. Unbleached kraft exports declined considerably from 65,740 metric tons in January, 1937, to 52,744 metric tons, a drop of 12,996 metric tons.

Swedish newsprint exports in January, 1938, were 13,814 metric tons compared with 16,236 in January a year ago, a decline of 2,422 metric tons. Kraft wrapping paper exports dropped from 14,033 metric tons in January, 1937, to 12,140 tons in January, 1938, a drop of 1,893 tons.

Sulphite wrapping paper exports also declined from 9,108 metric tons to 8,464 metric tons in January, 1938. Exports of greaseproof papers went down from 1,817 metric tons to 1,726 tons this past January.

The average decline of Swedish exports of wood pulp, sulphite and sulphate was 9.76 per cent in January, 1938, from January, 1937.

February Newsprint Statistics

● Production in Canada during February, 1938, amounted to 202,601 tons and shipments to 162,906 tons, according to the News Print Service Bureau. Production in the United States was 61,357 tons and shipments 62,480 tons, making a total United States and Canadian newsprint production of 263,958 tons and shipments of 225,386 tons. During February, 22,572 tons of newsprint were made in Newfoundland, so that the total North American production for the month amounted to 286,530 tons. Total production in February, 1937, was 376,575 tons.

The Canadian mills produced 140,952 tons less in the first two months of 1938 than in the first two months of 1937, which was a decrease of twenty-four and nine-tenths per cent. The output in the United States was 17,563 tons, or eleven and six-tenths per cent less than in the first two months of 1937; in Newfoundland 11,836 tons, or twenty and seven-tenths per cent less, making a total decrease of 170,351 tons, or twenty-two per cent.

Stocks of newsprint paper at the end of February were reported at 146,089 tons for Canadian mills and 24,801 tons for United States mills, making a combined total of 170,890 tons, compared with 132,318 tons on January 31, 1938. Considerable tonnage was accumulated at points from which water shipments will be made upon the opening of navigation.

Paper Men to Meet

● The Paper Mill Men's Club of Southern California will meet in April for a regular monthly session and to elect new officers for the ensuing year.

WALTER S. HODGES, Pacific Coast representative, and LEONARD McMASTER, Sales Manager of the Asten-Hill Manufacturing Company of Philadelphia, makers of asbestos dryer felts » » » Mr. McMaster arrived on the Coast March 21st for a month's trip with Mr. Hodges to pulp and paper mills in this region.

Trade Talk

of Those Who Sell Paper in the Western States

Jobbers and Millmen To Meet at Del Monte

Informal Gathering Scheduled for May 12, 13, 14th

● Once again the call goes out to the Pacific Coast paper clan for its annual spring gathering at Del Monte.

For twenty years the paper people have been meeting at the call of the Pacific States Paper Trade Association, but now that body has been dissolved and this year's gathering will be an informal meeting of paper jobbers, with the mill men, as usual, staging the golf tournament and other social and sports events.

Dates are May 12, 13 and 14th and chairman will be Victor E. Hecht, San Francisco, vice-president of the Zellerbach Paper Company. Edward L. O'Neil is secretary but it is likely the meeting will be so informal that no minutes will be kept.

There's to be a lighter air at this meeting than at the previous serious gatherings and there'll be something new in the programing of a soft ball contest, ping pong tournament and badminton tournament for those who don't desire to golf.

B. P. (Doc) Jaggard, San Francisco, Grays Harbor Pulp & Paper Company, has been given the job of lining up the softballers.

● Chairman of the golf committee again is G. J. Ticoulet, San Francisco, Crown Willamette Paper Co. Assisting him will be Andrew Christ, Jr., Western Wax Paper Co., Oakland; M. M. Baruh, Crown Zellerbach Corporation, San Francisco; W. J. Gray, Paterson Parchment Paper Co., San Francisco and C. Francis Jenkins, Kimberly-Clark Corporation, Los Angeles. There'll be a Calcutta pool, again, with Mr. Gray in charge.

On Thursday of convention week there'll be a meeting of the merchants and manufacturers and speaker will be A. E. Roth, president of the Waterfront Employers' Association, San Francisco.

Chairman Hecht says this convention week will be devoted to discussions of such problems as new federal laws and regulations, taxes, labor, traffic, inventory control, low moving items, sampling, buying trends, sales record statistics, delivery costs, free delivery, small orders, salesmen's compensation, small unit in exchange business, salesmen's educational program, changes in distribution practice, report on the 1938 national convention.

These perplexing problems will be discussed informally. Chairman Hecht quotes the "Reader's Digest": "She put her problems aside for a brainy day" and says these Del Monte days will be "brainy days" for the coast paper merchants.

Murphy Named Western Sales Manager by Fox River

● William C. Wing, president of the Fox River Paper Company, Appleton, Wisconsin, announced that Gordon Murphy is now western sales manager for the Pacific coast territory. The Sierra Paper Company of Los Angeles, Long Beach and San Diego, the Pacific Coast Paper Company of San Francisco, Oakland and Sacramento, and the West Coast Paper Company of Seattle and Portland, Butler Paper Corporation Divisions are exclusive distributors for the nationally advertied watermarked line of the company.

Mr. Murphy was formerly assistant manager of the Zellerbach Paper Company, southwest division. He went to Los Angeles eight years ago from the Zellerbach San Francisco office to head the printing paper department. He will make offices in Los Angeles and San Frascisco. The new connection became effective April 1.

Megel Leaving Hawley

● Dewey Megel will resign from the southern California district managership of the Hawley Paper Co. May 1. Mr. Megel has served as district manager for five years and has been with the firm eight years. His future plans have not been formulated yet.

Whiting Now Pacific Coast Sales Manager for Inland Empire

● S. R. Whiting recently assumed the duties of Pacific coast sales manager of the Inland Empire Paper Company of Millwood, Washington. Mr. Whiting, who has made his headquarters in Los Angeles, will continue to do so but will spend half of his time traveling through the coast territory.

With the Inland Empire Paper Company for seven years, Mr. Whiting has been associated with the paper industry during his entire business career. Prior to his connection with the Inland Empire Paper Company, he was sales manager for the Sierra Paper Company, which was his first western connection. He came west from Michigan before the World War. Earlier connections in the east were with the Watervliet Paper Company of Watervliet, Michigan, and after that the King Paper Company, now the Allied Paper Company of Kalamazoo.

S. R. WHITING
Pacific Coast Sales Manager, Inland Empire Paper Company

Field-Ernst Operating In New Building

San Francisco Envelope Manufacturers Complete Third Expansion Program Since Establishment in 1920

IN 1920 Alan D. Field and Joseph A. Ernst resigned their jobs with the Union Lithograph Company and established the Field-Ernst Envelope Company at 25 Fremont Street, San Francisco.

Neither was experienced in this field—the designing and manufacturing of envelopes, but realizing the demand for a quick source of envelope supply in Northern California, they entered this work with one thought in mind—**to create a better envelope service.**

Mr. Ernst handled the manufacturing departments, conquering the multiple problems—of which there were plenty. Mr. Field handled the front office and sales, mastering the obstacles of selling a product entirely foreign to him.

They were successful from the start and their business grew. In April, 1926, they moved to 45 Fremont St. occupying a four-story building, later acquiring two additional floors in an adjoining building. In the early part of this year they settled in their new manufacturing, warehouse and office building at the southeast corner of Tehama and Fifth streets—described as perhaps the finest envelope plant of its size in the United States.

● Field-Ernst's new home is a striking addition to San Francisco's industrial architectural beauty. Structure and equipment represent an investment of approximately $200,000. The new building, 80x275, is a two-story structure, with floor space of some 47,000 square feet and is designed to accommodate not only present requirements but also future expansion.

The second floor is 22 feet above the first floor and was planned to permit extension of a mezzanine into a full-sized floor later if desired. At present the mezzanine at the front office end of the building houses the advertising department, its supply room, a supply room for office stationery and a large conference room. The conference room is so constructed, with separate light switches and telephone and light outlets and inlets, that when expansion demands, the room can be made into two separate offices.

The building is of Class B reinforced concrete construction and has a "saw-tooth" roof, with a north light exposure, which gives the manufacturing departments a good clean light throughout the day. The location of the building is on one of the main arteries to the San Francisco-Oakland Bay bridge.

Manufacturing is done entirely on the second floor and the machinery is laid out in a novel plan facilitating production on a continuous circular motion. With the plant so arranged, there is no lost motion and delivery of envelopes is expedited. The cutting department has hydraulic lift tables for die cuts, the height of the table being regulated individually by the die-cutting operator.

With the thought of better envelope service well in mind, several large manufacuring machines have been installed which increases the output and establishes Field-Ernst as a quality envelope manufacturing plant.

● The offices are modernistic in design, with a very attractive lobby. On the floor of the lobby is the company trade-mark in two colors inlaid in linoleum. The effect is very pleasing to the eye and carries great advertising merit.

The employees have a well-equipped and cheery lunch room, modern in every detail with the essentials of a home kitchen. Each employee has a separate locker in well lighted and ventilated dressing rooms.

Numerologists say a peculiar quirk in numbers predicts good fortune for Field-Ernst in their new location. First they were at 25 Fremont Street and then moved to 45 Fremont Street and now they've combined these two and added a five, being at 245 5th Street.

Field-Ernst employs approximately 100 persons and maintains warehouses and sales offices in Los Angeles, Oakland, Portland and Honolulu.

Zellerbach Promotes Ferris and Boyer

● Ernest Ferris has been appointed manager of the printing paper department of the Zellerbach Paper Company in Los Angeles. Mr. Ferris was formerly manager of the San Diego division of the company and has been with Zellerbach for twenty years. He started with the company in the Los Angeles office and had been in San Diego for seven years prior to his recent promotion.

Francis M. Boyer, formerly credit and operating manager of the San Diego division, is now manager. Mr. Boyer started with the company in San Diego eight years ago.

Victor Hecht's Daughter To Marry Paper Man

● A June bride will be Miss Virginia Hecht, daughter of Victor E. Hecht, vice-president of the Zellerbach Paper Company, San Francisco. Her husband will be Eugene Kahn, with the General Paper Company, Los Angeles, graduate of University of Southern California and a former post graduate student at Stanford University. Miss Hecht is a niece of J. Y. Baruh, vice-president of the Crown Zellerbach Corporation.

Leonhard to Visit Coast

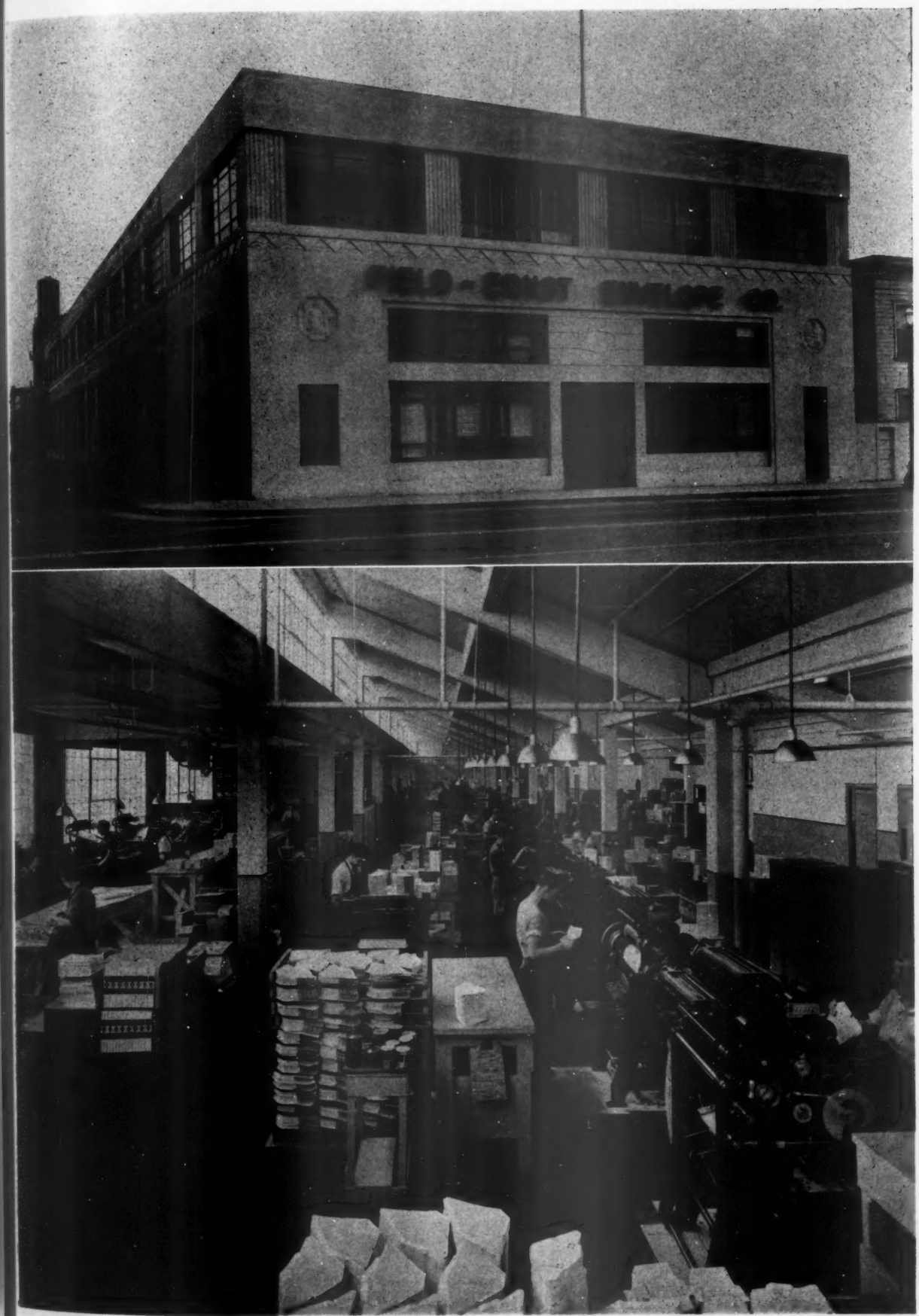
● E. R. Leonhard, vice-president in charge of sales of the Paterson Parchment Paper Co., of Brisotl, Pa., will be on the coast late in April to spend five or six weeks traveling the western territory with W. J. Gray, San Francisco, manager of Paterson Pacific Parchment Co. Mr. Leonhard will attend the Pacific Coast Paper Conference at Del Monte in May.

Hoagland Dies in Los Angeles

● Robert S. Hoagland of the credit department of the Zellerbach Paper Company in Los Angeles died suddenly at his desk late in March. Mr. Hoagland had been with the company for thirty years. In 1929 he retired from the credit managership, but shortly returned to take over lighter duties rather than remain idle.

●

At the top, the new manufacturing plant of the FIELD-ERNST ENVELOPE COMPANY in SAN FRANCISCO, the result of 18 years successful production of quality envelopes » » » BELOW, the second floor showing a battery of high speed envelope blanker presses » » » Note the daylight provided by the saw-tooth roof construction and the efficient layout of the envelope producing equipment.



Dixie Vortex Running New Los Angeles Plant

Entire Line Will Be in Production by Summer

● Production began at the new plant of the Dixie Vortex Company, located at Hollydale, suburb of Los Angeles, according to Geo. P. Hacker, Pacific sales manager for the eleven western states, in mid-February. Special printed items are being produced in part now until additional machinery is installed. Sufficient machinery is now set up to turn out the major portion of the Dixie Vortex line. By the latter part of the coming summer this will be augmented to include all machinery necessary to manufacture the entire line.

George Wohlbach is resident manager of the plant in charge of manufacturing operations. Vern Mahoney is in charge of customer service at the plant. The company will continue to maintain a Los Angeles sales office with production offices at the Hollydale plant.

The Dixie Vortex products include a complete water cup line, both flat bottom and cone shaped in design, a complete line of soda fountain cups, also of flat bottom and cone design, ice cream cups from the one ounce to the thirty-two ounce sizes, a complete line of cottage cheese cups, and a complete line of packaged picnic cups, these latter are wrapped in cellophane.

The new plant has a floor space of 46,000 square feet. It is of modern daylight factory construction, one story excepting the office area, which is two stories. It is located on the Union Pacific Harbor Belt railroad line. This is the fourth plant of the Dixie Vortex Company. The other three are located at Easton, Pa., Chicago and Toronto, Canada. The company makes its own machinery and holds exclusive patents on it. This plant will serve the nine western states.

● The Individual Drinking Cup Company, which manufactured the Dixie brand of drinking cups, was founded in New York City in 1908 by two young Harvard graduates. One of these men, Mr. Hugh Moore, was the inventor of the special machine for the manufacture of the cups. He is now chairman of the board of the new company. The company moved shortly after its founding to Philadelphia and from there to the site of one of its present factories at Easton, Pa. The Vortex Cup Company was founded in Chicago twenty years ago. R. C. Fenner, president of the present firm, was president of this company. The Individual Drinking Cup Company and the Vortex Cup Company merged in 1936 to form the present Dixie Vortex Company. The executive personnel of both firms have been retained in virtually the same offices as they held in the separate organizations.

Paterson Parchment Announces Changes

● W. J. Gray, San Francisco, manager of the Paterson Pacific Parchment Co., announces two important personnel changes in the firm's organization on the coast.

C. G. Bennett, formerly resident representative in the Pacific northwest, is promoted to be assistant sales manager and is transferred to the San Francisco office. Bennett has been with Paterson about 11 years.

W. G. Batson has been moved from the San Francisco sales staff to replace Mr. Bennett in the northwest and mountain states territory.

Mr. Batson early this month was visiting western Washington customers with Mr. Bennett. In June they will visit Eastern Oregon and Idaho.

● Mr. Bennett is widely known throughout the fisheries of Oregon, Washington and Alaska, and has been largely instrumental in developing the use of Patapar for wrapping fresh and frozen fish and as a can liner for fancy canned fish and shellfish, and for the vacuum packing of salt codfish.

In the cold-pack field he has been active in the perfection of packaging methods, and it was in his territory that vegetable parchment was first used in connection with the packaging of frozen fruits and vegetables. He also invented the use of vegetable parchment as a filter for gases, liquids and semi-solids, assigning the patents to the Paterson company.

Smith, Davidson & Wright Show 1937 Profit

● Net profit of $14,996, compared with a loss of $854 last year, is reported by the Vancouver paper house of Smith, Davidson & Wright for the fiscal year ended November 30, 1937, according to a statement just issued.

Income from the company's investments were also higher at $12,524, compared with $11,649, bringing the total net income to $27,519.

After paying $5,543 in dividends on 7 per cent first preferred stock and setting aside $4,272 as a tax reserve for profits levy, the company added $17,704 to capital surplus, bringing that account to $77,769.

The statement shows gross profit from operations at $256,571, compared with $231,428. General and administrative expenses including provision for bad debts and depreciation amounted to $241,575 compared with $232,282.

Partial payment of the year's instalment of dividends on the 7 per cent cumulative first preferred left arrears of dividends at 36 per cent, compared with 31½ per cent a year before.

● A slight increase in business is reported by the company, which is one of British Columbia's leading wholesale and specialty paper distributors. Cost of doing business, however, still shows a tendency to increase. A total of 2½ per cent was paid on the first preferred shares for the fiscal year ended November 30, the same as in the previous year. First payment for the new fiscal year was 1¾ per cent, paid April 1 this year.

Directors were elected as follows at the recent annual meeting: President, Frederick Smith; Francis Wright, G. Lyall Fraser, J. R. E. McLaren, Brig.-General Victor W. Odlum, R. C. Duns.

Net working capital, which has shown consistent improvement in recent years, was further increased last year, amounting to $261,884 at November 30, 1937, compared with $221,943 a year previously. Since November 30, 1934, the improvement in net working capital has amounted to $70,917.

Current assets at November 30 totalled $559,920, made up as follows (wtih previous year's figures in brackets): inventories, $424,421 ($252,894); accounts receivable less reserves for bad debts $122,152 ($102,684); life insurance surrender value $4,416 ($4,098); cash $6,572 ($10,444).

Current liabilities totalled $298,045 as follows, with previous year's figures bracketed: accounts payable $206,765 ($134,342); bills payable $86,980 ($113,460); reserve for taxes $4,300 ($375).

● Investments are the same as in the previous year with the exception of an addition of ten shares in Westminster Paper Company, bringing the company's holding in that enterprise to 17,198 shares carried at a cost of $166,757. Other holdings are 147 shares of Pioneer Envelopes, Ltd., at cost of $14,700 and 166 shares Stanley Paper Company at cost of $16,525. Total investments, $197,982, against $197,892, a year previously.

Liabilities other than current items are as follows: capital $529,530 (unchanged); capital surplus $77,769 ($50,064); reserve for depreciation, $42,848 ($36,163); mortgages on real estate and buildings $36,596 ($38,631); Royal Bank of Canada loan, $75,000 ($55,000); current, $298,045 ($248,178).

Mueller Named Zellerbach Chicago Manager

● George A. Mueller has been appointed manager of the Chicago division of the Zellerbach Paper Company succeeding Harry Todd who has resigned. Mr. Mueller became associated with the Zellrebach Paper Company when it acquired the Midland Paper Company of Chicago for whom Mr. Mueller was working.

McGrath Promoted By Zellerbach

● L. J. McGrath has been named assistant manager of the headquarters purchasing department of the Zellerbach Paper Company, San Francisco.

Angelus Paper Excelsior Products To Build New Plant

● The Angelus Paper Excelsior Products Company of Los Angeles will begin an extensive expansion program May 1st, according to F. C. Van Amberg, president and sole owner. The office building will be razed and a new building erected in its place which will cover a larger area than the present building and will be made a part of the factory building. The new development will add approximately 5,000 square feet of floor space, doubling the existing area. Offices will occupy the front west corner of the new building. New factory space will be devoted to manufacture of a newly developed gift pad. Warehousing will be concentrated in the back portion of the structure. The building will be one story and of re-inforced brick construction. The main line of the A. T. & S. F. railroad runs along the back of the building with a loading and unloading spur to the building itself.

One of the reasons for the expansion is to handle the manufacture of a new embossed gift pad which the company has developed and has been making to order for local department stores.

Two new Cameron slitters will be added to the machinery of the plant. Exact sizes are not yet determined.

● As well as the new gift pad the company makes adding machine paper, cash register paper, teletype paper, addressing and listing papers, ticker tape, serpentine, paper excelsior, paper and wood excelsior furniture pads, pipe and tire wraps and embossed chip board.

The company was founded in 1925 and has been at its present location for the past three years. The new expansion is expected to be completed in early July.

Southern California Flood Did Little Damage to Paper People

● The most destructive flood in its history, that swept across Southern California for four days, February 28 to March 3, did little damage to the paper industry, mill, converter and distributor alike weathering the storm with slight if any damage.

A check with a majority of the factors in the field indicated no actual losses. The California Fruit Wrapping Mills were shut down from March 2 through 7, due to the breaking of a gas main near Ventura and the need for the city of Pomona for all available gas. The Pioneer Division, the Flintkote Company erected sandbag levees along the 55th street side of its plant. Six inches of water got into the boiler plant and there was water in the roofing plant pits one day but this did not necessitate any shutdown. California-Oregon Paper Mills reported no trouble at all.

No trouble at all was the general report from all sources. Angelus Paper Excelsior Products Company, Brown Paper Goods Company, Carpenter Envelope Company, Dixie Vortex Company, the Jaite Company of Wilmington, National Card, Mat and Board Company, Union Bag & Paper Corporation, Western Waxed Paper Company among a few of those checked went Scot free of damage. Mr. Chas. C. Elliott of the Los Angeles Paper Manufacturing Company reported the astounding experience of having looked from his window and seen excited people beating large carp over the head with umbrellas in the street outside his plant and calmly wrapping them in newspapers and so home for dinner. The carp escaped from a nearby park lake when the lake expanded its area to include ordinarily waterless public thoroughfares.

Many paper men were detained in Los Angeles, either visitors or residents bound on calls in their territories. Many others were prevented from returning home due to the road washouts, to the consternation of their families whom they could not reach by wire or phone. One paper man reported seeing his car washed off the Roosevelt Highway into the Pacific ocean and then trudging for hours over the mountains for shelter.

● When Dr. George Parrish, city health officer, admonished the million and a half citizens of Los Angeles to boil all water for drinking purposes, paper drinking cup stocks dwindled over night and orders were frantically sent out for replenishment. This was one bright ray in the otherwise clouded and tragic scene left by the flood.

No warehouses handling paper stocks reported any damage. These, like the mills and converter factories, were apparently situated on high ground and so untouched.

With rails and highways closed shipments were delayed considerably. This and the general shock felt by local business, the paper market noticeably slowed as a result of the flood. With reconstruction work on its way and heightened activity anticipated as a result of it, the set-back is believed to be temporary only.

Mead Closes San Francisco Office

● Transferred to New York on April 15 was Hugh Wallace, for about eighteen months San Francisco representative of The Mead Sales Co., Dill & Collins and Wheelwright Papers, Inc. Mr. Wallace's office in San Francisco will be closed.

MacMillan Speaks On B. C.'s Need for Foreign Trade

● Prohibition of log export, often talked about by politicians in British Columbia but an issue on which no legislative action has so far been taken, would represent the repudiation of Empire trade agreements, according to H. R. MacMillan, president of H. R. MacMillan Lumber Export Company and probably the biggest individual factor in the province's forest industries.

Mr. MacMillan, in a recent address before the Vancouver Board of Trade, expalined the distinction between crown grant and leased forests in British Columbia. The crown grant timber represented timber that had been disposed of to private interests years ago and was as much the property of these private interests as anything could be. There was no power that could legally prevent the disposal of this timber by its owners in any manner they considered advisable. The provincial government had no control over export of logs from these crown grant forests, even though members of the government had often deplored the lack of such authority.

Leased timber was in a different category. This was subject to provincial jurisdiction and logs could not be exported from these leased forests without special permits from the provincial authorities. Inasmuch as the government policy was to prohibit export of logs from leased forests except in cases where the timber could not otherwise be economically disposed of, most of the log exports were from crown grant.

"Export of logs to Australia have increased very mataerially in recent years," said Mr. MacMillan. "Canada negotiated a tariff agreement with Australia under the terms of which Australia placed a preference on Canadian logs. On the strength of that agreement Australian interests invested large sums in the building of sawmills because they felt certain of a steady supply of raw material from Canada.

"If Canada should pass legislation now, prohibiting the export of logs we will be repudiating our agreement. There are those who argue that if we prohibited export of logs, Australia would buy lumber here instead. But don't kid yourselves; Australia would do nothing of the kind. She has the sawmills there and intends to use them. She will merely divert the orders for B. C. logs to the states of Washington and Oregon instead. B. C. will be the loser 100 per cent.

● "I can see where legislation of this order might lead us," continued Mr. MacMillan, the main theme of whose address was the importance of export trade to British Columbia and the vital value of Empire markets, protected from foreign competition. "The precedent would be established for the curtailment of all exports of frozen fish; instead we would be able to sell only the canned article. We would be prevented from shipping ore out of the country; the metal would have to be in the form of concentrates.

"The export channels for wheat would be blocked, too; instead we would be permitted to sell only flour in overseas markets. Relatively speaking, such developments would be no more absurd than proposed restriction of our log exports.

"If we impose restrictions of that nature we can expect retaliation from our customers thus imposed upon. Would it not be natural for them to bring influence to bear on their governments to refuse to sell us the primary goods we buy from them—goods that are vitally necessary to our well being?"

Newsprint Less Than 16 Inches Now Dutiable

● The United States Court of Customs and Patent Appeals on Monday, April 4, handed down a decision that newsprint paper in rolls 15 inches in width is dutiable as printing paper, not duty free as standard newsprint.

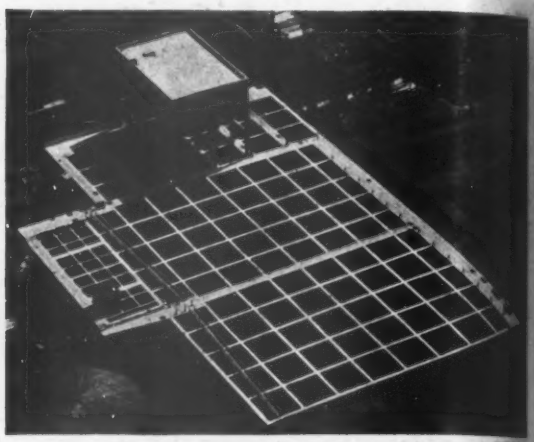
The Court of Appeals not only reversed the decision of the United States Customs Court in this case, but it also reversed itself on its own ruling rendered in 1933 in the case of the Cincinnati Enquirer that paper 15¾ inches in width is duty free as standard newsprint.

The Court also noted that paper in these narrow widths is used for comic supplements and special issues, and is not used in the usual news sections of the newspapers.

This ruling means that any roll paper less than 16 inches in width will henceforth be held by Customs Officials for duty.

The decision also affirms the decision in the Christian Science Monitor case that only such paper as was chiefly used by newspapers immediately prior to 1930 is duty free as standard newsprint.

The 15-inch paper was held for duty by Buffalo Customs officials upon representations made by the Import Committee, which furnished witnesses to sustain the action of those officials when the case came to trial. Acting Assistant Atty. Gen. Charles D. Lawrence personally argued the appeal before the United States Court of Customs and Patent Appeals.



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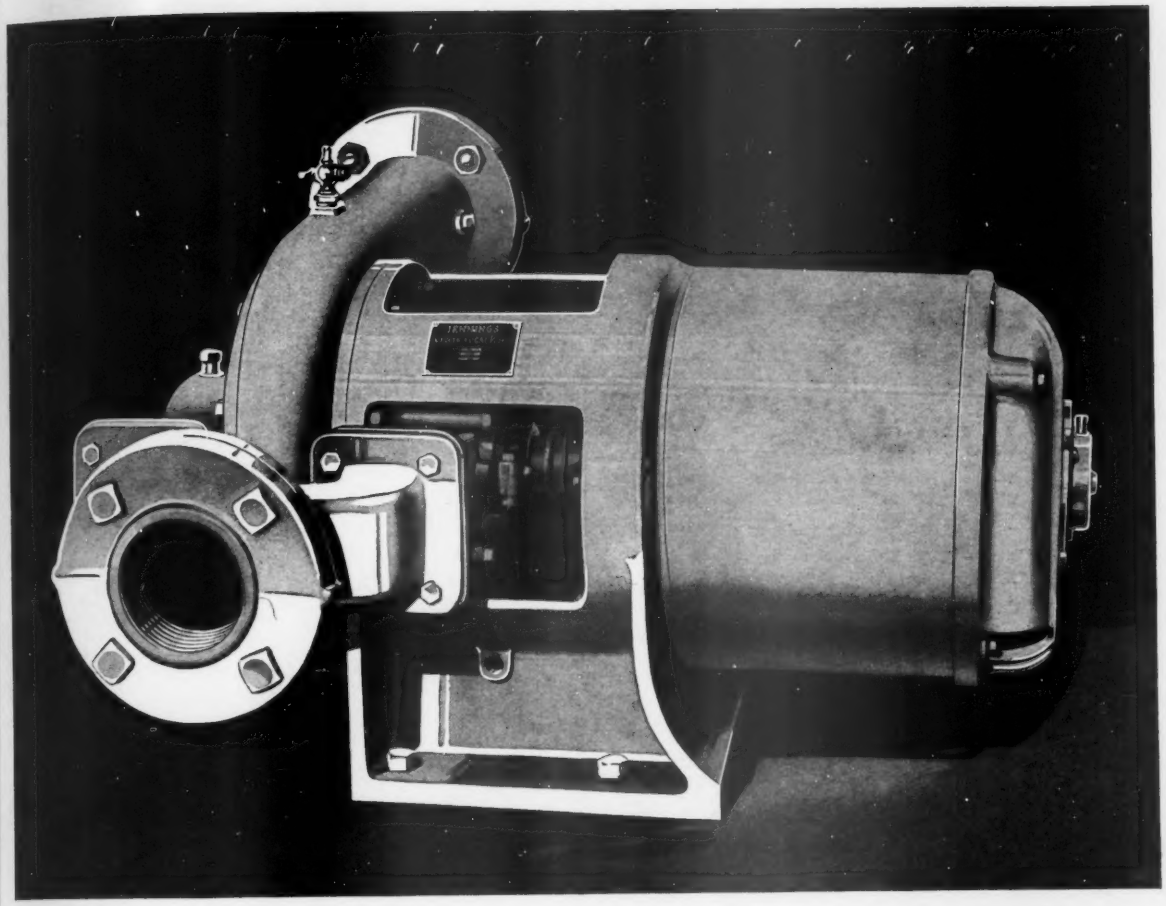

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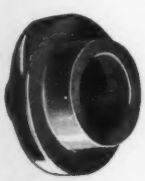

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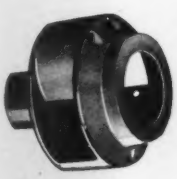

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